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BOARD OF PUBLIC WORKS.

GEORGE S. GRAHAM,	-	-	-	-	President.
GEORGE J. BAER,	-	-	-	-	Member.
GEORGE W. YOUNG,	-	-	-	-	Member.
GEORGE P. HARDESTY,	-	-	-	-	Member.
R. M. GODFREY,	-	-	-	-	Secretary.
W. S. CAMPBELL,	-	-	-	-	Clerk of Supplies.
IDA G. FIELD,	-	-	-	-	Stenographer.

DEPARTMENT OF ENGINEERING.

HENRY A. WISE,	-	-	-	City Engineer.
STEPHEN A. MITCHELL,	-	-	-	Assistant City Engineer.
H. P. SELDEN,	-	-	-	Superintendent of Construction.
MARCUS E. GETCHELL,	-	-	-	Chief Clerk.
H. B. MANN,	-	-	-	Supt. of Sidewalks and Curbing.
E. A. HARPER,	-	-	-	Chief Draughtsman.

DEPARTMENT OF STREETS AND ALLEYS.

WALTER M. DAVIS,	-	-	-	Superintendent.
W. S. HUMPHREY,	-	-	-	Chief Clerk.

DEPARTMENT OF BUILDINGS.

A. W. LOVE,	-	-	-	Superintendent.
SAMUEL E. BEAR,	-	-	-	Clerk.

DEPARTMENT OF WATER WORKS.

D. W. LONGWELL,	-	-	-	Superintendent.
W. KIERSTED,	-	-	-	Chief Engineer
CHAS. E. RICKERT,	-	-	-	Chief Clerk

REPORT OF THE BOARD OF PUBLIC WORKS
OF KANSAS CITY, MISSOURI.

For the Fiscal Year Ending April 18th, 1898.

To the Honorable Common Council, Kansas City, Mo.:

GENTLEMEN:—The Board of Public Works herewith respectfully submits its annual report for the fiscal year 1897 (from April 19th, 1897, to April 18, 1898).

The apportionment for the year was \$150,000.00; the unexpended appropriations brought over from the last fiscal year (1896) amounted to \$4.20; also an unused balance of \$523.79, which had been certified by the Comptroller, but for which the ordinance appropriating did not pass; at the end of the fiscal year \$5,490.73 was transferred back to the General Fund, leaving a total of \$145,028.26 to be accounted for by the Board.

The total receipts and disbursements for the fiscal year were as follows:

RECEIPTS.

Apportioned by the Common Council	\$150,000 00
Unexpended appropriations and certified balance from fiscal year, 1896	527 99
	\$150,527 99

CONTRA.

Amount transferred to General Fund	\$5,490 73	
Amount transferred to Fire Department	1,525 00	\$7,024 73
To be accounted for		\$143,503 26

DISBURSEMENTS.

Department Expenses	(Board of Public Works	\$12,112 56	
	(Engineering Department	15,753 24	
	(Street and Alley Department	78,061 48	
	(Building Department	6,850 61	\$112,807 89
Appropriations, expenditures on account of			263 17
Appropriations unexpended, cash in City Treasury			129 30
Total			\$113,503 26

STEAM ROAD ROLLERS.

The expenses for rent, salaries, coal and repairs of operating the Steam Road Rollers for the year, amounted to \$2,514.48.

The following table shows the expenses of the several departments of the Board of Public Works and the funds at its disposal, accounted for each year since its organization.

Expenditures of the Board of Public Works Department Since Organized.

Fiscal year ending in April.	Board of Public Works.	Engineering department.	Street and Alley department.	Building department.	Total.	Funds at disposal of Board and accounted for.
1890.....	\$ 6,658 73	\$71,863 36	\$83,392 28	\$17,868 37	\$179,282 74	\$269,814 57
1891.....	14,597 75	70,957 86	95,316 44	12,723 71	193,595 76	268,417 95
1892.....	10,947 76	56,854 03	86,409 76	7 871 47	161,583 02	223,882 03
1893.....	9,274 23	57,858 11	80,507 38	7,382 31	155,022 03	177,090 74
1894.....	24,588 13	49,495 91	67,746 25	6,551 32	148,376 61	181,499 61
1895.....	9 857 67	43,059 70	70,219 15	5,799 57	137 936 09	148,818 17
1896.....	9,868 50	49,575 30	81 529 69	6,921 45	145,894 94	146,387 29
1897.....	13,452 36	42,125 06	66,701 77	6,810 00	129,089 19	132,594 11
1898.....	12,142 56	46,753 24	78,661 48	6,850 61	142 807 89	143,503 26
Totals.....	\$111,882 69	\$485,042 57	\$718,884 20	\$78,278 81	\$1,393,588 27	\$1,692,037 73

PUBLIC IMPROVEMENTS.

Table "A" gives in detail the total amount of public work constructed through the Engineering Department, and the total expenses of that department since the organization of the Board of Public Works.

Table "A."

Fiscal Year Ending April	Grading Streets and Alleys	Curbing	Paving Streets and Alleys	Sidewalks Plank	Sidewalks First Class	Sidewalk Repairs	Bridges and Viaducts	Sewers District	Sewers Public	Sewers O. K. Creek	Sprinkling and Cleaning	Miscellaneous Public Work	Total Amount of Work	Expenses of Engineering Department
1900	\$100,701 71	\$73,412 44	\$5,575 702 34	\$38,714 43	\$22,070 47	\$6,005 57	\$37,000 00	\$140,657 27	\$7,853 20	\$30,811 64	\$1,830 00	\$0,282 12	\$813,380 88	\$71,803 86
1901	59,707 70	50,271 49	144,118 03	60,031 64	92,094 81	96,005 57	0 213 57	73,730 20	12,001 50	51,114 62	426 72	2,215 14	573,106 76	70,057 86
1902	28,000 00	27,103 42	238,072 98	13,583 83	52,215 35	8,721 43	3,576 00	19,482 20	8,418 36	85,623 12	426 72	1,625 06	483,184 16	66,854 08
1903	17,000 00	33,000 00	223,421 91	8,513 06	27,504 33	8,043 42		20,855 86	12,403 16	85,623 12	2,864 18	407 00	391,207 30	57,858 11
1904	42,020 70	30,000 00	230,770 21	8,390 05	28,083 05	14,210 05	15,300 00	63,653 00	1,724 49	41,838 77	26,622 65	2,001 79	810,180 76	49,496 91
1905	12,902 00	13,108 00	106,071 07	3,528 15	20,007 20	7,011 37		81,834 41	4,000 00	41,838 77	44,715 00	3,583 70	697,681 09	43,059 70
1906	20,000 00	15,000 00	145,620 33	3,063 72	4,654 99	10,738 61		4,031 91	24,001 04	19,380 33	19,380 33	77 50	570,890 84	47,575 80
1907	28,100 12	40,200 84	328,155 81	2,470 77	49,240 91	22,744 49		118,325 83	17,304 19	215,388 05	8,432 26	3,432 26	827,006 02	42,125 06
1908	4,028 00	00 00 00	019,000 00	1,731 74	80,385 15	17,405 04	2,407 00	118,730 15		215,388 05		4,001 47	007,018 07	45,753 24
Total	\$75,000 00	\$307,877 00	\$3,551,859 07	\$130,040 11	\$1,023,050 24	\$103,653 96	\$65,522 57	\$641,896 94	\$90,176 74	\$215,388 05	\$33,796 86	\$24,700 73	\$5,754,274 50	\$485,042 57

STEAM ROAD ROLLERS.

The expenses for rent, salaries, coal and repairs of operating the Steam Road Rollers for the year, amounted to \$2,514.48.

The following table shows the expenses of the several departments of the Board of Public Works and the funds at its disposal, accounted for each year since its organization.

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Fiscal year ending in April.	Board of Public Works.	Engineering department.	Street and Alley department.	Building department.	Total.	Funds at disposal of Board and accounted for.
1890.....	\$ 6,658 78	\$71,803 36	\$83,302 28	\$17,368 37	\$179,282 74	\$269,814 57
1891.....	14,597 75	70,957 86	95,316 44	12,723 71	193,595 76	268,417 95
1892.....	10,917 76	56,854 03	86,409 76	7,871 47	161,583 02	228,862 03
1893.....	9,274 23	57,858 11	80,507 38	7,382 31	155,022 03	177,090 74
1894.....	24,583 13	49,495 91	67,746 25	6,551 32	148,376 61	181,499 61
1895.....	9,857 67	43,059 70	70,219 15	5,799 57	137,936 09	148,848 17
1896.....	9,868 50	49,575 30	81,529 69	6,921 45	145,894 94	146,387 29
1897.....	13,452 36	42,125 06	66,701 77	6,810 00	129,089 19	182,594 11
1898.....	12,142 56	45,753 21	78,661 48	6,850 61	142,807 86	143,503 26
Totals	\$111,882 69	\$485,012 57	\$718,884 20	\$78,278 81	\$1,393,588 27	\$1,692,037 78

PUBLIC IMPROVEMENTS.

Table "A" gives in detail the total amount of public work constructed through the Engineering Department, and the total expenses of that department since the organization of the Board of Public Works.

Table "A."

Fiscal Year Public April	Grading Streets and Alleys	Curling	Paving Streets and Alleys	Sidewalks Plank.	Sidewalks First Class	Sidewalks Repairs	Bridges and Viaducts	Sewers District.	Sewers Public.	Sewers O. K. Creek.	Sprinkling and Cleaning	Miscellaneous Public Work.	Total Amount of Work.	Expenses of Engineering Department.
1900	\$100,701 71	573 012 11	13,075 702 34	328 714 33	572 070 47	56 983 57	257,000 00	\$110 057 27	27 533 20	500,811 61	\$1,396 98	\$6,282 12	\$143,380 88	\$71,893 36
1901	99,707 70	30 271 49	114,118 15	66 661 64	92 091 81	56 983 57	6 213 57	73,730 20	12 091 50	51 114 52	426 72	2,215 14	573,106 76	70,467 86
1902	18,900 06	27 706 12	238 072 98	16,585 83	62 219 35	8 721 43	3,576 10	19,482 20	8,418 36	35,023 12	2,361 15	1,525 98	483,184 15	54,354 03
1903	17,905 03	33,004 00	223 421 91	8 513 98	27 504 33	8 913 42	15,300 00	20,855 88	12 493 16	35,023 12	2,361 15	407 00	301,237 39	57,458 11
1904	42 020 79	36 008 05	320 770 21	8 380 65	28 683 03	14 216 05	15,300 00	63 623 00	1,724 49	41,838 77	25,522 65	2,001 79	810,190 76	49,465 91
1905	12 802 16	11 18 35	606 071 07	3,528 15	20 987 20	7 611 37	15,300 00	51,834 41	4,969 00	41,838 77	44,715 00	3,583 70	507,681 69	43,059 70
1906	20 004 44	15 98 90	665 620 33	3 084 72	4 654 00	16 758 61		4,631 91	24 001 04		19,389 33	77 56	570,830 84	47,575 80
1907	28 190 12	40 200 84	525 150 84	2 470 77	10 740 91	22,744 49	2,467 00	118 325 83				3,642 28	827,666 02	42,125 06
1908	34 028 04	60 409 75	610 655 00	1 731 74	89 385 15	17 065 04		118 736 15	17,304 19			4,061 47	907,018 07	45,753 24
Totals	\$1,788,004 05	6327 857 32	\$1,251 889 07	\$136 949 11	\$425 030 24	\$103,453 98	\$65,572 57	\$641 886 94	\$90,176 74	\$215,888 65	\$98,796 89	\$24,710 73	\$5,754,274 56	\$485,042 57

The work completed during the fiscal year through the Engineering Department cost \$697,018.07, and the expenses of the Department for all purposes were \$45,753.24.

The paving and re-paving of streets cost \$337,969.64, and of alleys, \$11,986.32, a total of \$349,955.96.

The mileage and cost of each kind of pavement is as follows:

Materials.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt—Trinidad Lake	18,672.20	2.59	43,492.70	\$ 91,895 76	\$2 12
Asphalt—American Bituminous Rock	10,019.10	1.00	84,447.90	70,248 96	2 04
Brick	20,877.43	5.65	92,172.90	120,810 42	1 42
Macadam	14,806.10	2.80	55,392.00	58,000 82	1 05
Totals	68,374.83	12.94	225,505.50	\$349,955 96	

The following tables show the mileage and cost of all street paving work constructed from 1889 to 1897, inclusive, and kinds of material used:

Commencing January 1, 1889, Ending May 9, 1889.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt	2,570.00	0.480	7,615.03	\$21,407 76	\$2 80
Macadam	1,027.00	.194	4,068.70	2,746 13	67
Totals	3,597.00	0.680	11 714.33	\$21,153 89	

Commencing May 9, 1889, and Ending April 30, 1890.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt	10,764.30	2.01	40,244.27	\$112 683 96	\$2 80
Cedar Blocks	37,674.97	7.135	146,772.11	208,607 68	1 421
Granite Blocks	1,178.00	.222	5,079.57	16,527 12	3 253
Brick	3,525.00	.667	13,256.72	27 050 36	2 041
Totals	53,137.27	10.064	205,352.70	\$361,871 82	

Commencing April 30, 1890, and Ending April 20, 1891.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt	4,752.00	0.90	17,680.00	\$ 48,800 92	\$2 765
Cedar Blocks	14,901.70	2.82	50,304.00	71,160 78	1 412
Macadam	546.00	.10	2,765.00	1,161 80	42
Stone Blocks	2,655.80	.50	7,915.80	28,074 89	2 915
Totals	22,855.50	4.32	78,754.00	\$144,287.89	

During Fiscal Year Commencing April 20, 1891, and Ending April 18, 1892.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt	15,126.00	2.83	57,110.80	\$114,298 71	\$2 526
Brick	6,682.50	1.27	21,079.80	40,890 42	1 977
Macadam	8,825.80	1.67	31,253.50	32,839 91	1 658
Stone Blocks	774.30	.14	3,164.70	7,859 91	2 573
Cedar Blocks	1,834.20	.26	4,572.90	6,767 80	1 48
Totals	32,742.80	6.20	123,071.70	\$232,157 04	

During Fiscal Year Ending April 17, 1893.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Brick	9,534.95	1.80	31,820.30	\$ 57,557 74	\$1 619
Asphalt	12,394.15	2.35	48,163.80	124,117 04	2 576
Macadam	11,612.05	2.62	50,207.70	37,510 46	747
Totals	33,572.16	6.77	133,291.80	\$219 185 24	

During Fiscal Year Ending April 16, 1894.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt	20,046.10	3.51	66,413.50	\$257,089 35	\$2 785
Macadam	18,678.15	3.59	71,081.00	63,911 47	894
Vitrified Brick	32,116.10	6.18	118,962.00	155,184 55	1 617
Stone Blocks, repairs	2,250.00	.42	9,367.50	6,256 88	668
Totals	82,420.35	15.60	302,164.00	\$522 482 25	

During Fiscal Year Ending April 15, 1895.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt—Trinidad Lake ..	27,221.70	5.16	118,460.26	\$348,751.62	\$2.64
Macadam	6,837.60	1.29	21,772.00	10,587.02	.899
Granite Blocks ..	329.50	0.06	1,238.80	3,077.84	2.47
Brick, Vitrified	13,131.40	2.49	45,977.80	61,914.79	1.346
Cedar Blocks, repave	2,668.15	0.39	8,481.60	9,689.98	1.05
Totals	49,588.35	9.39	195,930.46	\$463,024.20	

During Fiscal Year Ending April 20, 1896.

Material Used.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt—Trinidad Lake ..	34,717.75	6.57	129,612.78	\$829,791.36	\$2.511
Brick ..	10,157.70	1.92	35,496.40	68,719.25	1.307
Macadam	12,268.99	2.32	55,739.20	49,814.42	.894
Stone Blocks ..	1,487.70	0.28	6,885.00	9,635.83	1.40
Cedar Blocks.....	600.50	0.11	1,762.00	1,973.44	1.12
Totals	59,232.64	11.21	227,485.38	\$139,034.30	

During Fiscal Year Ending April 19, 1897.

Materials.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Square Yd.
Asphalt	44,420.30	8.41	156,056.80	\$340,498.60	\$2.181
Brick	23,204.00	4.17	82,703.60	117,671.27	1.424
Macadam ..	24,126.50	4.57	121,842.00	78,990.01	.645
Stone Blocks	289.20		402.10	1,045.93	2.80
Totals ..	92,110.00	17.15	361,005.10	\$538,155.81	

The aggregate mileage of paved streets is as follows:

Material Used.	Total Miles.	Increase during year.	Decrease during year.
Asphalt	30.97	4.19	Replaced by other pavements 7.37
Vitrified Brick	23.41	1.74	
Cedar Blocks	13.78		
Stone Blocks	2.12		
Macadam	20.70	2.31	
	100.07	Net 4.17	

With the close of the fiscal year, the public work under contract amounted to \$155,269.60, as follows:

UNDER CONTRACT.

Paving	(Asphalt, 19, contract approximate cost, \$57,518.93	
	(Brick streets, 7, " " " 35,305.81	
	(Brick alleys, 2, " " " 1,719.11	\$94,543.85
Curbing	(Nat. stone, 15, " " " 10,697.37	
	(Artif. " 7, " " " 8,863.14	19,560.51
Sidewalks	(Nat. " 4, " " " 2,506.72	
	(Artif. " 17, " " " 15,526.60	
	(Brick, 9, " " " 3,654.46	21,697.78
Grading	(Streets, 6, " " " 2,911.20	
	(Alleys, 3, " " " 367.30	3,281.50
Planting trees,	1, " " " "	129.80
Public sewers,	1, " " " "	201.50
Miscellaneous work		15,854.48
Total		\$155,269.60

Certificates of special taxes against city property for improvements were issued to the amount of \$1,155.51 during the fiscal year.

Special tax bills were issued to the number of 14,169. Objections to them were filed in but 28 cases.

LIGHTING STREETS.

At the close of the fiscal year there were 1,653 gas lights, 1,538 gasoline lights, and 216 electric lights in service, an increase of 84 gas lamps, 377 gasoline lamps, and 7 electric lights during the year.

The city paid \$12.00 each for gas lights (moonlight schedule), \$110.00 each for electric (arc) lights (all night schedule),

and \$17.00 each for gasoline lights (moonlight schedule), and the total cost of street lighting for the year was as follows:

Kansas City, Missouri, Gas Co	\$18,892 88
F. K. Hoover, gasoline lights.....	19,499 07
Kansas City Electric Light Co	23,159 00
Lighting in annexed territory	2,570 02
Total	\$63,920 97

Cost Street Lighting Fiscal Year, 1893	\$68,929 10
*Cost Street Lighting Fiscal Year, 1894	58,428 01
*Cost Street Lighting Fiscal Year, 1895.....	64,574 83
Cost Street Lighting Fiscal Year, 1896.....	59,077 77
*Certain deductions made to bring the cost within the apportionment for the year.	

WATER WORKS.

The city has received during the year, revenue from the water works to the amount of \$427,115.21, and with the balance of \$127,064.62 from last year, makes \$554,179.83 to be accounted for.

The total operating expenses of the department, including the expenses of the office of Assessor and Collector of Water Rates, were \$132,164.25. The fourth and fifth semi-annual payments of interest on the \$3,100,000.00 of water works bonds amounted to \$138,847.50; appropriations and expenditures for the extension of water mains and betterment of plant, amounted to \$101,470.96; \$60,000.00 were placed in the sinking fund to provide for the payment of the bonds, and a balance of \$121,693.12 remains in the hands of the City Treasurer.

The total receipts and disbursements of Water Works Department for the fiscal year 1897, were as follows:

RECEIPTS.

Water Rates	\$139,091 52	
Meter Rates.....	234,123 31	
Building Permits..	4,394 76	
Special Permits ..	2,009 66	
Deposits	3,358 25	
Corporation Cocks ..	1,899 50	
Meters Set	2,209 88	
Meters Repaired...	988 55	
Meters Sold	3,427 50	
Fines	359 00	
Miscellaneous	37,622 95	
Interest and Miscellaneous ..	2,168 53	
Total Gross Receipts ..	\$431,649 41	
Less Rebates and Deposits.	4,534 20	
Net Receipts	\$427,115 21	
Balance with City Treasurer from 1898	127,064 62	\$554,179 83

DISBURSEMENTS.

Superintendent and Engineer's Office ..	\$ 8,025 35	
Street Department	14,208 73	
Inspection Department	12,405 62	
Meter Department	14,768 87	
Betterment of Plant	34,065 59	
Turkey Creek Pumping Station	41,369 55	
Quindaro Pumping Station	25,079 06	
Miscellaneous Expenses	4,634 99	
Assessor and Collector's Office	11,609 40	
Rebates and Refunds	66 68	
Interest on Bonds	138,847 50	
Sinking Fund	60,000 00	
Appropriations	67,405 37	
Total Disbursements	\$432,486 71	
Balance with City Treasurer to 1898	121,693 12	\$554,179 83

The accompanying reports of the City Engineer, Superintendent of Streets, Superintendent of Buildings, and Superintendent of Water Works' Department are complete in detail and in summary, and many of the suggestions and recommendations set forth are entitled to, and should receive, careful consideration.

THE BOARD OF PUBLIC WORKS,

GEO. S. GRAHAM, *President.*

GEO. J. BAER,)

GEO. W. YOUNG,) *Members*

GEO. P. HARDESTY,)

April 18th, 1898.

SECRETARY'S REPORT.

STATEMENT OF BOARD OF PUBLIC WORKS FUND.

For the Fiscal Year Ending April 18th, 1898.

Apportionment for the fiscal year, 1897....	\$150,000 00	
Appropriations from last fiscal year.....	527 99	
		\$150,527 99

CONTRA.

Amount transferred to General Fund	\$ 5,499 73	
Amount transferred to Fire Dept.	1,525 00	\$7,024 73
Balance to be accounted for ..		\$143,503 26

EXPENSES

BOARD OF PUBLIC WORKS.

Pay Rolls, Members and Clerks.....	\$ 6,432 07	
Miscellaneous Expenses	3,196 01	
Steam Road Rollers, pay rolls, rep'rs, &c.	2,514 48	
Total		\$12,142 56

ENGINEERING DEPARTMENT.

Pay Rolls for Department	\$ 43,679 04	
Pay Rolls for Horse Hire	925 11	
Abstracts for Grading and Condemnation Cases, and General Information.....	642 66	
Miscellaneous Expenses.....	506 43	
Total		\$45,753 24

STREETS AND ALLEYS DEPARTMENT.

Pay Rolls for Department	\$ 68,933 25	
Pay Rolls for Horse Hire	882 88	
Miscellaneous Expenses.....	8,265 35	
Total		\$78,081 48

BUILDINGS DEPARTMENT.

Pay Rolls for Department	\$ 6,836 60	
Miscellaneous Expenses	14 01	
Total		\$ 6,850 61

APPROPRIATIONS.

Expended under Appropriation	\$ 266 17	\$ 266 17	143,074 06
Balance unexpended and forwarded to fiscal year, 1898			\$ 429 20

FISCAL YEAR 1897. BOARD OF PUBLIC WORKS DEPARTMENT.
Disbursements.

Month 1897.	Board of Public Works	Engineering Department.	Streets and Alleys Department.	Buildings Department.	Total Expenses.	Expended under Appropriations.	Total Disbursements.
April 1 st to 30	\$481 00	\$1,480 82	\$2,749 67	\$245 54	\$4,886 88		\$4,886 88
May	2,133 83	3,880 24	7,780 51	556 44	14,426 35		14,426 35
June	862 19	3,737 83	7,172 36	580 93	12,621 83		12,621 83
July	942 85	3,516 04	6,947 81	573 78	11,980 48		11,980 48
August	886 61	4,036 85	6,347 90	570 13	11,840 99		11,840 99
September	770 51	3,716 75	7,017 82	573 18	12,108 01		12,108 01
October	1,225 90	3,807 26	6,684 00	570 13	11,687 29		11,687 29
November	762 20	3,971 68	6,313 20	574 18	11,621 46	\$206 17	11,887 63
December	570 10	3,742 05	6,149 68	580 93	11,043 66		11,043 66
January, 1898	818 14	3,793 88	6,304 12	570 78	11,486 96		11,486 96
February	1,238 82	3,776 79	6,514 25	548 33	12,078 89		12,078 89
March	935 06	1,040 56	6,461 22	583 18	12,020 91		12,020 91
April 1 st to 18	324 35	2,234 41	2,182 59	313 53	5,054 88		5,054 88
Totals	\$12,142 56	\$15,753 24	\$78,061 48	\$6,850 61	\$112,807 89	\$206 17	\$113,074 06

FISCAL YEAR 1897. BOARD OF PUBLIC WORKS.
Disbursements.

Month 1897.	Pay Rolls.	Steam Rollers.	Reaper.	Stenographer.	Quartermen at Workhouse.	Office Supplies.	Sprinkling.	Stone Crossings.	Water Main.	Adding Machine.	Totals.
April 18-30	\$197 07	\$ 61 18	\$20 00			\$ 4 10	\$126 78	\$ 92 00			\$ 431 00
May	687 50	1 674 75				10 00	68 50				2 433 83
June	687 50	141 10				23 50	68 50				992 19
July	687 50	130 62			\$107 48	2 50	68 50				942 55
August	507 50	130 13			116 98	1 00	68 50				946 61
September	507 50	136 51				1 00	68 50				770 51
October	507 50	766 15				1 00	68 50		\$557 15		1 925 80
November	507 50	138 70				1 00	106 00	31 00			763 80
December	507 50	75 00						262 82	\$ 75 64	\$129 00	870 10
January 1898	687 50						41 43		68 50	\$350 00	1 326 93
February	687 50								867 13		1 395 63
March	637 50								1 86		839 35
April 18	822 50										
Totals	\$8,432 07	\$2,514 48	\$30 00	\$261 41	\$44 10	\$727 91	\$376 42	\$172 80	\$567 25	\$129 00	\$12,142 84

FISCAL YEAR 1897. DEPARTMENT.

Month 1897	Pay Rolls.	Horse Hire	Absence and Information.	Blue Print.	Tools and Instrument.	Office Furniture and Repair.	Stakes and Supplies	Office Supplies	Westport Pay Roll.	Totals.
April 1st-31	\$1,203 11	\$25 00	\$107 54	75	00	\$25 00	\$12 75	00		\$1,440 39
May	2,762 30	70 00		5 40		10 00	1 00	00		3,608 00
June	3,038 20	70 00				4 50	1 00	22 13		3,773 23
July	3,207 20	70 00	24 44	0 00			4 00	00		3,551 04
August	3,699 23	70 00	23 14	1 00			75 25	10 48		4,058 06
September	3,604 24	70 00	50 64	12 87		0 00		5 48		3,769 16
October	3,441 50	70 00	26 42	7 60			18 00	1 12		3,697 36
November	3,461 00	70 00	27 44	1 00			25 17	23 72		3,697 43
December	3,577 30	70 00	5 04				22 28	1 00	87 75	3,712 46
January 1st-31	3,652 64	80 00	212 00	0 00				24 00		3,712 64
February	3,735 30	80 00						0 00		3,715 30
March	2,180 44	35 97		0 00				0 00		2,216 41
April 1st										3,284 41
Totals	\$12,679 04	\$925 11	\$642 06	\$40 94		\$76 50	\$174 11	\$108 13	\$97 75	\$46,783 34

FISCAL YEAR 1897. STREETS AND ALLEYS DEPARTMENT.
Disbursements.

Month 1897.	Pay Rolls.	Horses and Keep.	Sewers.	Streets.	Bridges and Crosswalks.	Trash Receptacles.	Supply Yard.	Warehouse.	Vault Cleaning.	Supplies.	Office Supplies.	Repairs, General.	Tools and Repairs.	Totals.
April 19-30	\$2,022 86	\$ 82 80	\$ 5 25	\$ 81 31	\$44 07			\$1 85	\$5 00	\$8 75		48 55	\$ 7 45	\$2,749 67
May	6,761 14	172 06	305 30	108 83	1,172 78							17 15	19 00	7,506 54
June	5,847 38	67 41	170 18	178 18								38 50	19 30	7,472 38
July	5,720 53	69 75	81 92	198 00	530 11	\$300 00					\$5 25	4 95		6,917 81
August	5,771 09	72 41	253 88	77 13	153 24							19 10	9 35	6,817 90
September	6,036 78	66 75	121 58	475 81	205 75								2 05	7,017 82
October	5,731 36	62 00	100 13	109 44	15 02			00 00				62 96	13 05	6,034 00
November	5,511 33	34 00	73 62	158 05	344 88					1 11		17 00	88 06	6,313 50
December	5,339 32	97 50	230 55	93 75	34 90					1 10		12 70	11 92	6,149 68
January 1898	5,910 11	33 00	101 16	98 61	90 99					65 12		25 76	46 15	6,304 12
February	5,532 04	88 10	160 73	170 50	484 74					1 28		8 45	28 26	6,514 25
March	5,908 02	53 50	91 52	290 00									30 45	6,401 22
April 1-18	2,114 06	13 00		55 50										2,182 59
Totals	\$58,933 25	\$802 88	\$1,701 01	\$2,182 11	\$3,445 48	\$300 00		\$61 85	\$5 00	\$83 30	\$5 25	\$248 72	\$228 61	\$78,661 48

FISCAL YEAR 1897. BUILDINGS DEPARTMENT.
Disbursements.

Month 1897.	Pay Rolls.	Office Furniture and Repairs.	Office Supplies.	Blue Prints.	Totals.
April 19-30	\$245 84				\$245 84
May	548 53	\$2 03	\$6 08		556 64
June	540 93				540 93
July	573 78				573 78
August	570 13				570 13
September	570 13	3 00			573 13
October	570 13				570 13
November	574 13				574 13
December	540 93				540 93
January 1898	570 13			\$0 65	570 78
February	548 53				548 53
March	540 93	1 50	0 75		543 18
April 1-18	313 53				313 53
Total	\$8,853 61	\$5 53	\$6 83	\$0 65	\$8,854 61

FISCAL YEAR 1897. STEAM ROLLER EXPENSES.
Disbursements.

Month 1897.	Pay Rolls.	Coal	Supplies.	Repairs.	Rent.	Totals.
April 19-30	\$ 54 50	\$2 63				\$ 57 13
May	90 00	8 94	\$39 51	\$291 30	\$1,250 00	1,674 75
June	104 00	3 04		20 25		111 19
July	109 50	7 71	2 71	1 00		120 92
August	127 50	7 07	1 76			136 33
September	121 50	7 70	4 15	5 13		138 51
October	105 00			3 15		108 15
November	37 50	3 85	0 15	16 90		58 40
December						
January 1898	75 00					75 00
February						
March						
April 1-18						
Totals	\$632 50	\$26 54	\$44 41	\$316 73	\$1,250 00	\$2,514 78

STATEMENT OF SPECIAL APPROPRIATIONS
For the Fiscal Year 1897.

No. of Ord.	CONTRACTS.	Appropriations and Balances.	Amount Expended.	Amount Charged Back.	Balance Unexpended.
9039	To construct a public drinking fountain at No 1st and 2nd	\$910 00	\$206 17	\$53 83	\$100 00
9040	To construct public sewer in alley	100 00			\$50 00
9041	To construct drinking fountain at 70th	250 00			25 00
9042	To construct drinking fountain at 70th	75 00			
CONDEMNATIONS.					
9090	To confirm verdict under Ordinance No. 4320 to open and establish Monroe Ave. from St John Ave to Smart Ave	4 30			4 30
	Ordinance to pay M. Moran for work on sewer, certified but not passed	521 79		521 79	
	Total appropriations (and balances) to be accounted for	\$1,253 99	\$206 17	\$587 62	\$150 20
		\$1,253 99			\$1,253 99
	Total expenditures for fiscal year, 1897		206 17		
	Total unused balances charged back to fund			587 62	628 79
	Total to be deducted				
	Unexpended balance over to year 1898				\$150 20

RECEIPTS OF WATER DEPARTMENT.

Classified Table of Receipts of Water Department from the time (September 1, 1895) the City took possession.

Fiscal Year Ending.	Water Rates.	Meter Rates.	Building Permits.	Special Permits.	Deposits.	Corporation Cocks.	Meters Set.	Meter Repairs.	Meters Sold.	Fines.	Miscellaneous.	Interest and Miscellaneous.	Rebates and Deposits Returned.	Deposited with City Treasurer.
April 30, 1896	\$ 95,046 11	\$110,201 60	\$2,574 05	\$1,103 82	\$9,422 05	\$ 548 35	\$1,243 72	\$ 573 78	\$1,131 00	\$121 00	\$18,231 79	\$ 988 07	\$ 823 35	\$67,225 19
April 30, 1897	132,501 43	218,796 30	3,024 03	1,455 13	5,703 80	1,042 20	1,607 30	1,198 48	3,304 50	531 00	24,981 50	1,619 47	3,249 15	397,146 74
April 30, 1898	139,061 32	254,123 31	1,304 76	2,000 06	3,356 25	1,869 50	2,269 84	968 55	3,427 50	350 00	37,622 95	2,168 53	4,534 20	427,115 21
Totals	\$367,298 66	\$572,211 80	\$10,594 04	\$1,028 61	\$15,482 70	\$3,460 65	\$5,123 86	\$2,756 79	\$7,863 00	\$1,311 00	\$104,793 24	\$1,656 07	\$8,606 70	\$1,001,487 14

EXPENDITURES OF WATER DEPARTMENT.

Classified Table of Expenditures of Water Department from the time (September 1, 1895) the City took possession.

Fiscal Year Ending.	Superintendent and Engineer's Office.	Street Department.	Inspection Department.	Meter Department.	Betterment of Plant.	Turkey Creek Pumping Station.	Quindaro Pumping Station.	Miscellaneous Expenses.	Inspector and Collector of Water Rates.	Rebates and Refunds.	Interest on Bonds.	Sinking Fund.	Appropriations to Extend Mains, etc.	Totals.
April 30, 1896	\$10,000 00	\$ 8,125 00	\$5,234 33	\$ 8,022 33	\$ 1,014 64	\$21,049 79	\$15,904 05	\$4,012 83	\$ 6,310 00	\$284 80	\$ 60,750 00	\$10,000 00	\$11,427 11	\$199,890 53
April 30, 1897	8,913 17	13,857 50	8,911 43	13,133 79	4,028 12	31,037 50	21,623 27	4,391 78	11,137 11	65 74	139,600 00	50,000 00	30,398 22	327,907 78
April 30, 1898	8,025 25	14,288 73	12,406 62	11,768 87	33,065 60	11,309 55	25,079 03	1,634 00	11,000 40	605 68	138,847 50	60,000 00	67,465 37	432,495 71
Totals	\$26,938 42	\$36,271 23	\$36,552 38	\$32,924 99	\$18,108 36	\$63,397 84	\$62,506 35	\$18,039 40	\$30,457 50	\$117 32	\$318,097 50	\$120,000 00	\$109,250 70	\$969,794 02

FISCAL YEAR 1897. DEPARTMENT OF WATER WORKS.

Receipts.

Month.	Water Rates.	Meter Rates.	Building Permits.	Special Permits.	Deposits.	Corporation Cocks.	Meters Set.	Meters Repaired.	Meters Sold.	Fines.	Miscellaneous.	Comptroller's Receipts, Interest and Miscellaneous.	Rebates and Deposits Returned.	City Treasurer, Deposited With.
April 1-30 1897	\$ 1,582 25	\$ 918 00	\$ 58 84	\$ 25 80	\$ 87 50	\$ 59 00	\$ 88 50	\$ 9 25	\$ 40 50	\$ 46 00	\$ 4 00	\$ 21 10	\$186 67	\$ 2,705 07
May	1,380 30	18,109 17	897 82	125 40	235 75	167 00	200 06	98 30	295 50	87 00	2,625 80		505 73	28,167 46
June	1,533 37	18,275 62	617 58	192 25	424 50	155 00	122 60	59 30	220 50	31 00	8,208 11		268 48	24,576 85
July	31,695 51	19,676 52	226 97	80 19	278 50	102 25	171 70	28 10	819 00	84 00	8,760 49		278 43	56,144 80
August	1,707 52	20,222 91	683 66	100 30	283 00	178 50	165 45	123 85	813 50	23 00	8,061 47		453 65	26,889 51
September	1,743 75	21,450 25	544 48	191 75	299 50	360 00	214 05	107 20	397 50	35 00	8,728 54		462 70	28,604 27
October	32,393 27	22,001 96	256 91	243 09	876 00	190 00	251 30	44 30	877 50	74 00	2,553 25	1 31	543 79	58,219 10
November	1,058 84	21,826 33	795 56	220 62	309 50	161 00	160 03	138 10	227 00	6 00	2,198 08	448 77	374 74	27,164 59
December	967 19	19,823 64	56 45	389 68	800 50	91 00	228 00	158 40	829 00	4 00	2,657 32	420 45	281 07	25,144 56
January, 1898	32,787 79	19,467 98	184 35	235 85	232 50	87 00	196 06	88 25	284 00	15 00	2,064 23	387 88	294 25	55,786 12
February	873 23	17,728 09	87 95	23 10	134 00	98 50	164 15	109 35	206 50	1 00	2,124 68	331 99	410 95	21,471 59
March	1,239 81	18,205 19	218 01	162 18	227 00	162 25	141 50	19 70	174 00	3 00	45 66	275 62	251 05	20,622 87
April 1-18	30,149 19	16,387 65	266 23	19 85	188 00	88 00	161 50	10 45	243 00		9,601 38	281 91	227 69	57,168 92
Totals	\$139,091 52	\$234,123 81	\$4,594 76	\$2,009 66	\$3,356 25	\$1,899 50	\$2,209 88	\$986 56	\$3,427 50	\$359 00	\$37,622 96	\$2,168 58	\$4,594 20	\$427,115 21

FISCAL YEAR 1897. DEPARTMENT OF WATER WORKS.

Expenditures.

Month.	Superintendent and Engineer's Office	Street Department	Inspection Department	Meter Department	Betterment of Plant.	Turkey Creek Station.	Quindaro Station.	Miscellaneous	Assessor and Collector of Water Rates.	Refunds	Interest on Bonds.	Sinking Fund.	Appropriations.	Expenses Total.	Receipts Total.
Balance with City Treas.	\$235 77	\$ 234 45	\$ 234 91	\$ 327 05	\$ 414 45	\$ 1443 72	\$ 147 75	\$ 2 40	\$ 234 30				\$ 9,371 02	\$ 13,030 97	\$127,044 62
April 1896	754 87	754 87	754 01	1,200 21	223 07	8 127 37	2 145 12	77 40	787 05				10,061 63	21,054 43	2,705 07
May	1 109 24	1 109 24	1 123 11	1 207 74	1 177 34	8 344 00	2 160 19	54 25	942 05				10,059 69	92,480 73	24,576 25
June	1 150 18	1 150 18	1 47 07	1 025 75	544 00	3 544 70	1 814 14	123 50	945 01	\$ 7 49			8,409 19	14,412 88	54,144 80
July	1 204 44	1 204 44	1 067 16	1 827 34	2 951 24	4 381 14	2 938 70	107 50	943 50	35 72		\$30,000 00	1 971 41	47,514 25	26,340 51
August	919 27	919 27	1 044 15	1 846 69	1 920 81	3 740 62	2 196 70	154 00	958 46				8 099 97	16,042 32	28 044 37
September	1 527 87	1 527 87	1 106 94	1 407 13	5 242 45	3 901 19	1 815 71	21 00	197 72				5 103 25	21,855 31	58 219 10
October	1 871 61	1 871 61	1 319 58	1 247 32	16 925 33	3 692 00	2 059 52	2 268 87	1 117 61				10,573 29	41,833 65	27 164 59
November	1 212 33	1 212 33	975 30	1 003 44	2 738 93	3 233 47	2 306 75	119 89	1 084 05				2,559 58	85,128 05	25,144 56
December	1 145 01	1 145 01	1 040 97	1 704 78	771 23	3 234 38	1 940 45	94 54	942 91		60,007 50	80,000 00	6 162 81	47,056 79	55,736 12
January 1897	1 310 28	1 310 28	944 48	1 023 94	318 15	3 800 51	1 041 51	84 60	1 251 37				149 81	10,810 30	21,471 50
February	1 115 53	1 115 53	1 005 02	1 022 54	578 00	2 949 00	1 846 84	1 135 10	1 222 67	23 67			1,545 12	12,004 80	20,622 87
March	507 45	507 45	630 41	624 30	343 30	1 583 25	1 235 08	301 55	483 32				948 00	7,131 80	57,104 92
Balance with City Treas.														121,003 12	
Totals	\$11,208 78	\$12,406 62	\$14,704 87	\$34,005 59	\$41,800 55	\$35,079 06	\$4,634 99	\$11,009 40	\$66 00	\$138,847 50	\$90,000 00	\$97,405 87	\$54,179 83	\$54,179 83	\$54,179 83

APPROPRIATIONS
For Extensions of Water Mains and Improvements.

Respectfully submitted,
R. M. GODFREY, Secretary.

PURCHASING AGENT'S REPORT.

Statement of Stamps Purchased for the Different City Departments for Fiscal Year Ending April 19, 1898.

DEPARTMENTS.	April 19-30, 1897.	May.	June.	July.	August.	September.	October.	November.	December.	January, 1898.	February.	March.	April 1-18, 1898.	Totals.
Water	\$2.00 (0)	\$12.00 (0)	\$9.00 (0)	\$9.00 (0)	\$19.00 (15)	\$5.00 (0)	\$14.00 (18)	\$71.00 (8)	\$140.00 (0)	\$72.00 (0)	\$110.00 (0)	\$94.00 (16)	\$26.00 (0)	\$1,257.66
City Electrical Inspector				2 (0)	2 (0)	8 (0)	2 (0)	2 (0)	1 (0)	2 (0)	2 (0)	2 (0)	2 (0)	12.50
Park Board	1 (0)	2 (0)	4 (0)	2 (0)	2 (0)	3 (0)	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	26 (0)
City Treasurer	10 (0)	24 (0)	4 (0)	25 (0)	25 (0)	3 (0)	2 (0)	2 (0)	20 (0)	28 (0)	25 (0)	25 (0)	2 (0)	700 (30)
City Plumbing Inspector	2 (0)	2 (0)	4 (0)	2 (0)	2 (0)	4 (0)	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	4 (0)	2 (0)	26 (0)
City License Inspector	16 (0)	4 (0)	25 (0)	16 (0)	24 (0)	10 (0)	10 (0)	2 (0)	40 (0)	10 (0)	21 (0)	14 (0)	2 (0)	144 (0)
City Comptroller			6 (0)	6 (0)	6 (0)	6 (0)	2 (0)	6 (0)	2 (0)	4 (0)	2 (0)	25 (0)	2 (0)	31.75
City Clerk			8 (0)	42 (0)	42 (0)	6 (0)	2 (0)	2 (0)	2 (0)	6 (0)	51 (0)	26 (0)	1 (0)	104 (0)
City Assessor	1 (0)	2 (0)	1 (0)	1 (0)	25 (0)	8 (0)	6 (0)	25 (0)	2 (0)	2 (0)	20 (0)	10 (0)	2 (0)	71.60
Mayor's Secretary	6 (0)	2 (0)	6 (0)	6 (0)	12 (0)	12 (0)	6 (0)	16 (0)	10 (0)	12 (0)	6 (0)	4 (0)	2 (0)	120 (0)
Superintendent Streets	2 (0)	5 (0)	3 (0)	4 (0)	2 (0)	4 (0)	10 (0)	4 (0)	6 (0)	2 (0)	6 (0)	4 (0)	2 (0)	61 (0)
Superintendent Buildings	2 (0)	1 (0)	3 (0)	2 (0)	2 (0)	4 (0)	2 (0)	2 (0)	2 (0)	4 (0)	2 (0)	2 (0)	2 (0)	27 (0)
City Boiler Inspector				2 (0)	2 (0)	5 (0)	2 (0)	2 (0)	2 (0)	1 (0)	2 (0)	2 (0)	4 (0)	8.50
City Auditor	5 (0)	1 (0)	1 (0)	6 (0)	1 (0)	14 (0)	4 (0)	2 (0)	22 (0)	3 (0)	3 (0)	4 (0)	4 (0)	48.50
City Engineer	3 (0)	8 (0)	2 (0)	2 (0)	57 (0)	5 (0)	4 (0)	2 (0)	6 (0)	2 (0)	8 (0)	2 (0)	25 (0)	143.55
Legal Department	10 (0)	20 (0)	20 (0)	20 (0)	16 (0)	10 (0)	13 (0)	10 (0)	6 (0)	9 (0)	4 (0)	8 (0)	5 (0)	141 (0)
Clerk of Supplies	6 (0)	2 (0)	3 (0)	2 (0)	6 (0)	4 (0)	4 (0)	5 (0)	2 (0)	4 (0)	2 (0)	2 (0)	2 (0)	40 (0)
Fire Department				2 (0)	10 (0)	2 (0)	137 (0)	2 (0)	2 (0)			2 (0)		159 (0)
Fire Patrol				2 (0)	2 (0)	2 (0)	25 (0)					5 (0)		12 (0)
Board Public Works	2 (0)	2 (0)		2 (0)	2 (0)				1 (0)		2 (0)	5 (0)		38 (0)
City Market Master	1 (0)	4 (0)	1 (0)	1 (0)	1 (0)	10 (0)	1 (0)	22 (0)	4 (0)	4 (0)	2 (0)	4 (0)	20 (0)	5.50
Hospital and Board of Health	4 (0)	4 (0)	4 (0)	16 (0)	2 (0)	6 (0)	6 (0)	10 (0)	8 (0)	6 (0)	16 (0)		6 (0)	100 (0)
Police Department		8 (0)	4 (0)	11 (0)				10 (0)						70 (0)
Totals	\$100 (0)	\$210 (10)	\$125 (50)	\$502 (50)	\$687 (00)	\$144 (20)	\$190 (00)	\$148 (88)	\$208 (00)	\$190 (70)	\$253 (05)	\$202 (40)	\$94 (00)	\$3,491.72

STATEMENT OF PURCHASES

For the Different City Departments for Fiscal Year Ending April 18, 1898.

Mouth.	Board Public Works.	Water.	Fire.	Fire Patrol.	Work House.	Hospital and Board of Health.	Printing and Station- ery.	Expense.	Park.	Totals.
April 18-30, 1897	\$ 427 95	\$10,497 35	\$ 604 47	\$ 45 92	\$153 61	\$562 04	\$ 431 23	\$ 441 21	\$ 10 18	\$18,178 96
May	2,993 08	13,522 30	2,642 17	814 17	469 56	1,507 72	856 89	787 01	15 71	23,058 68
June	1,993 82	12,768 83	1,204 69	306 12	372 65	1,193 21	656 43	1,090 17	47 61	19,624 51
July	1,641 47	5,063 78	1,925 05	68 84	448 73	955 72	831 49	2,064 28	62 19	13,062 45
August	947 94	6,971 09	3,572 60	267 65	426 96	1,082 45	1,332 54	1,062 85	820 18	16,004 21
September	1,245 80	8,500 64	746 38	127 53	419 36	1,054 18	951 15	667 75	57 48	13,770 27
October	1,331 00	11,052 19	1,427 34	73 29	241 72	1,109 96	973 78	3,491 29	23 74	19,724 31
November	1,395 67	25,410 80	1,058 35	484 50	513 01	1,075 21	1,189 22	4,835 73	124 53	36,087 11
December	1,022 55	7,776 72	2,559 47	143 29	1,890 46	1,444 30	732 63	1,923 24	90 03	17,591 69
January, 1898	816 52	9,812 12	1,694 67	277 16	454 99	1,590 27	1,295 65	1,897 55	78 22	17,857 15
February	1,807 82	3,726 89	653 39	456 62	592 58	1,580 43	495 35	670 75	159 77	10,113 60
March	1,169 16	4,543 74	1,021 77	109 14	372 67	1,262 93	664 73	1,485 42	90 08	10,679 64
April 1 to 18	124 32	2,589 43	143 57	83 22	238 56	637 71	251 17	865 64	298 70	4,672 35
Totals	\$16,917 10	\$122,220 97	\$10,254 82	\$2,757 45	\$6,643 86	\$15,056 16	\$10,572 26	\$20,742 89	\$1,818 87	\$215,448 88

Respectfully submitted.

W. S. CAMPBELL, Purchasing Agent.

ANNUAL REPORT
OF THE
CITY ENGINEER,

FOR FISCAL YEAR

Ending April 18, 1898.

To the Honorable, the Board of Public Works.

GENTLEMEN:—I have the honor to submit herewith, report of the operations of the Department of Engineering for the year ending April 20th, 1898, accompanied by tabulated statements setting forth in detail the nature of all public work constructed during the fiscal year, and also all work under contract at this date.

Respectfully submitted,

HENRY A. WISE,
City Engineer.

STREET PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 18, 1898, AT NOON.

Barber Trinidad Lake Asphalt.

Street.	From	To	Former Pavement.	Thick-ness. Inches	Foundation.	Lineal Feet.	Square Yards.	Cost per Sq. Yd.	Cost.	No. of Bills.
Charlotte st	S. line Sixteenth st	N. line Eight'th st.	None.	1½	1½ in. bituminous conc., 6 in. hyd. conc.	940.00	3,109.40	\$2 12	\$6,591 98	51
Eight'h st	E. line Woodl'd av	W. line Olive st	None.	1½	1½ in. bituminous conc., 6 in. hyd. conc.	1,837.20	5,254.70	2 12	11,139 96	77
Eighteenth st	W. line Br'dw'y st.	E. line Summit st.	Cedar Blk.	1½	1½ in. bituminous conc., 4 in. hyd. conc.	1,131.90	3,086.00	2 12	6,542 32	20
Sixteenth st	W. line Br'dw'y st.	E. line Summit st.	None.	1½	1½ in. bituminous conc., 4 in. hyd. conc.	1,244.80	4,416.00	2 10	9,273 60	64
Brooklyn ave	S. line Tenth st	N. line Twelfth st.	Cedar Blk.	1½	1½ in. bituminous conc., old conc., 6 in	824.70	1,876.40	2 12	3,977 97	43
Minne st	E. line Garfield av	W. line Olive st	None.	1½	1½ in. " " 4 in. concrete	704.30	2,485.10	2 12	5,268 41	25
Tenth st	W. line Br'dw'y st.	E. line Summit st.	Cedar Blk.	1½	1½ in. " " 6 in. old conc.	1,345.09	4,886.90	2 12	9,800 23	51
Twentyninthst	E. line Cherry st.	W. line Troost ave.	None.	1½	1½ in. " " 4 in. concrete	1,756.50	5,533.10	2 12	11,730 17	20
Charlotte st	N. line lots 48 and 49, Beacon H. P.	S. line lots 41 and 50, Beacon H. P.	None.	1½	1½ in. " " 4 in. concrete	484.00	1,351.80	2 12	2,864 76	16
Campbell st	S. line 29th st.	N. line Bacon Hill	None.	1½	1½ in. " " 4 in. concrete	215.70	608.70	2 12	1,417 64	8
Lydia ave	S. line Twelfth st.	N. line Fifte'nth st	None.	1½	1½ in. " " 4 in. concrete	1,372.30	4,748.70	2 12	10,152 04	88
Indiana ave	S. line Twelfth st.	N. line Fifte'nth st	None.	1½	1½ in. " " 4 in. concrete	1,420.20	4,609.40	2 12	9,962 73	61
*Troost ave	S. line Ninete'th st	N. line K. C. Belt Ry. Bridge	Cedar Blk.	1½	Diamond bevel edge brick, 6 in concrete, 2 in. sand, 1½ in. bituminous conc.	475.09	1,837.00	2 00	3,674 00	Private
13 Contracts.	2.59 miles.					13,672.20	48,492.70	2 12	\$91,805 76	524

*Combination Pavement—Trinidad Lake Asphalt and Diamond Beveled Edge Brick. Cedar Blocks taken up, 3,786 lineal feet.

AMERICAN BITUMINOUS ROCK (GILSON) ASPHALT.

Street	From	To	Former Pavement.	Thick-ness, Inches	Foundation.	Lineal Feet.	Square Yards.	Cost Per Sq. Yd.	Amount.	No. of Bills.
Grand Ave	So. line of Twen- tieth St	North Line Belt Line Bridge	Cedar Blks	2	6 in. Old Concrete	799 (H)	4,579 (H)	\$2 00	\$ 9,158 00	8
Thirtieth St	East line of Oak St	East line (Grand Ave (Main St.))	None.	2	6 in. Concrete	1,487 (H)	4,380 90	2 10	9,094 80	57
Nineteenth St	East line Main St	East line Tracy Ave	Cedar Blks	2	6 in. do	4,863 80	14,563 10	2 00	29,126 20	99
Broadway	So. line 10th St east of Midway	South line Twen- ty-first St	None.	2	6 in. do	2,540 40	8,871 20	2 08	18,452 10	148
Oak St	South line Thir- tieth St	Southern City Limits, 31st St	None	2	6 in. do	682 70	1,517 60	2 10	3,186 96	40
Eight St	East Line Meeker St	East line Oak St north of 6th St.	Cedar Blks	2	6 in. do	198 20	586 10	2 10	1,230 81	8
6 Contracts	1 1/2 miles					10,016 10	34,447 90	\$2 04	\$70,248 96	355

Cedar Blocks taken up, 5,859 lineal feet.

MACADAM

Street		From	To	Material Used.					No. of Tax Bills.
				Lineal Feet Paving.	Square Yards Paving.	Cost per Square Yard.	Total Cost.		
Independence Boulevard		E line of Waltrond ave north of St John ave	Eastern city limits	1,750.70	7,870.20	\$1.72	\$13,536.71	56	
Gulnotte Ave		W line Lydia ave	A point 88 ft. east of the S. E. cor- ner of lot 67, blk 1, H & S. Add	8,418.40	15,771.80	.76	11,995.34	108	
Indiana Ave		S. line Eighteenth st	Southern city lim- its, center of 31st st	7,620.00	31,750.80	.90 1/2	82,477.74	288	
3 Contracts.		2.80 Miles		14,908.10	55,392.00	\$1.047	\$58,000.82	467	
				Cedar Blocks taken up, 5,418.40 lineal feet					

Street.	From	To	Pavement	Spaced between brick	Foundation.	Lineal Feet.	Square Yards.	Cost per Square Yard.	Cont.	Line No.
Lydia ave	N. line 14th st	N. line 14th st	9-11 ced. bk	Port. Cem.	Grt 4 in concrete, 2 in. sand	1,297.00	4,401.40	\$1 44	\$4,353.35	34
Wyoming st	Sixteenth st	Liberty st	Macadam	Sand	Old macadam, 1 1/2 in. sand	2,250.80	9,201.50	1 04	9,509.56	37
Lydia ave	S. line 14th st	N. line 14th st	None	Port. Cem.	Grt 6 in concrete, 2 in. sand	1,300.40	5,713.20	1 55	8,916.32	65
Twelfth st	W. line Hick- ory st	E. line Liberty	Macadam	Port. Cem.	Grt Old macadam, 2 in. sand	203.60	432.70	1 20	558.18	18
Nineteenth st	Wyoming st	Genesee st	Bank Grav	Port. Cem.	Grt 6 in. concrete, 2 in. sand	270.70	1,085.50	1 54	1,671.67	2
Twelfth st	W. line Broad- way st	E. li. Pennsylvania	Cedar Blks	Port. Cem	Grt 6 in. concrete, 2 in. sand	653.10	1,631.80	1 17	1,909.21	21
Virginia ave	S. line 12th st	N. line 11th st	None	Port. Cem	Grt 4 in. concrete, 2 in. sand	600.00	2,657.40	1 57	4,643.12	61
Cherry st	S. line Inde- pendence av.	N. line 8th st	Cedar Blks	Port. Cem.	Grt 6 in concrete, 2 in. sand	954.80	3,194.10	1 17	4,711.30	41
Wyandotte st	S. line 10th st	N. line 17th st	Cedar Blks	Port. Cem.	Grt 6 in old conc., 2 in. sand	617.50	1,201.90	1 15	1,382.19	26
Baltimore ave	S. line 24th st	N. line 31st st	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	1,251.50	3,431.10	1 51	5,180.96	106
Charlotte st	S. line 8th st	N. line 12th st	9-12, ced bk	Port. Cem.	Grt 6 in concrete, 2 in. sand	1,551.80	6,328.50	1 47	9,354.54	117
Olive st	S. line 14th st	N. line K. C. Bt Ry. Bridge	None	Sand	6 in concrete, 2 in. sand	580.80	2,155.40	1 35	2,909.79	17
Bellevue ave	S. line 24th st	N. line 21st st	None	Sand	6 in concrete, 2 in. sand	610.00	2,062.80	1 40	2,887.92	88
Leaust st	Eighteenth st	Nineteenth st	Cedar Blks	Sand	6 in. concrete, 2 in. sand	446.00	1,707.80	1 38	2,365.30	35
Baltimore ave	C. line 17th st	N. li. S. W. Bvd	Cedar Blks	Port. Cem	Grt 6 in. concrete, 2 in. sand	792.80	3,369.30	1 42	4,784.41	52
Sixteenth st	E. line Wood- land ave	W. line Olive st	None	Sand	6 in. concrete, 2 in. sand	1,849.90	5,505.50	1 44	7,790.28	32
Seventeenth st	W. li. Grand av	E. li. Baltimore	None	Sand	6 in. concrete, 2 in. sand	745.80	2,540.30	1 37	3,492.54	12
Sixteenth st	East line Wyo- ming st	W. li. Liberty st	None	Sand	6 in. concrete, 2 in. sand	200.00	894.00	1 36	1,179.36	4
Baltimore ave	S. line 10th st	C. line 17th st	Cedar Blks	Port. Cem.	Grt 6 in. concrete, 2 in. sand	646.30	3,517.00	1 40	4,928.80	28
Holmes st	S. line Inde- pendence av	N. line 8th st	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	1,005.00	3,418.10	1 40	5,110.06	47
Morrell ave	E. line Waltrond	W. line Hales av	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	1,113.50	3,090.30	1 48	4,529.24	46
Roberts st	E. line Indiana	W. line Hales av	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	463.80	1,273.50	1 50	1,910.25	24
Wyandotte st	S. line 17th st	N. li. S. W. Bvd	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	1,125.00	2,524.00	1 40	3,557.16	64
Woodland ave	S. line 10th st	N. line 10th st	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	405.70	1,378.00	1 41	1,963.32	22
Campbell st	S. line 5th st	N. li. Indep av	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	1,124.13	3,882.60	1 42	5,532.70	52
Bellevue ave	S. line 21st st	N. line 24th st	None	Port. Cem.	Grt 6 in. concrete, 2 in. sand	610.70	2,046.20	1 48	3,058.61	45
Michigan ave	S. line 16th st	N. line 14th st	None	Sand	6 in. concrete, 2 in. sand	897.10	2,575.10	1 36	3,515.01	44
Hell st	N. city limits of Westport	C. line 32d st	None	Sand	6 in. concrete, 2 in. sand	746.70	2,012.30	1 49	3,016.44	58
Hell st	Southly line, S. W. Bvd	S. City Limits	None	Sand	6 in concrete, 2 in. sand.	230.00	816.60	1 34	1,097.51	14
20 contracts.						24,905.48	84,320.50	\$1 39.7	\$117,824.10	1166

Cedar blocks taken up, 7,311.90 feet
Macadam taken up, 2,731.10 feet.

ALLEY PAVING CONSTRUCTED DURING FISCAL YEAR ENDING APRIL 18, 1898, AT NOON.
Brick Paving.

Between	From	To	Spaces between Brick.	Foundation		Lineal Feet.	Square Yards.	Cost per Square Yard.	Total Cost.	No. of Bills.
				Sand Inch.	Conc. Inch.					
Thirteenth street and Fourteenth street Main street and Baltimore avenue	Washington street Tenth street Thirteenth street	Pennsylvania avenue A point 110 ft. north of Eleventh street	Port. Cem. Grt	2	4	257.80	284.50	\$1 60	\$480 80	87
Harrison st. and Troost av.	Thirteenth street	Fourteenth street	Port. Cem. Grt	1 1/2	6	331.00	519.00	1 08 1/2	1,030 22	27
Third st. and Fourth st	Main street	Walnut street	Port. Cem. Grt	2	4	448.20	746.10	1 63	1,216 14	41
Grand ave. and McGee st	Thirteenth street	Fourteenth street	Port. Cem. Grt	2	6	302.50	490.80	1 57	783 00	18
Immediately west of Broadway street	Fourteenth street	South line of Law- ton Place Addition	Sand	2	6	447.60	818.40	1 47 1/2	1,207 14	26
Delaware street and Wy- andotte street	Fourth street	Sixth street	Sand	2	6	147.60	183.70	1 51 1/2	278 31	9
Grand ave and Walnut st	Fifth street	Missouri avenue	Port. Cem. Grt	2	6	453.20	791.30	1 38 1/2	1,056 39	21
Washington street and Pennsylvania avenue	Alley immediately south of Tenth street	Eleventh street	Sand	2	6	303.80	527.20	1 58 1/2	834 20	21
McGee st. and Oak st	Eleventh street	Ninth street	Sand	2	6	340.80	387.70	1 50 1/2	580 53	18
McGee st. and Oak st	Twelfth street	Thirteenth street	Sand	2	6	288.10	511.40	1 52 1/2	779 82	18
Eleventh street and Twelfth street	Brooklyn avenue	Park avenue	Sand	2	6	428.80	686.30	1 52	1,067 18	24
Washington street and Pennsylvania avenue	Twentieth street	Twenty-first street	Sand	2	6	267.10	428.10	1 39 4-10	593 77	14
Delaware street and Wy- andotte street	Fourth street	Fifth street	Port. Cem. Grt	2	6	601.00	967.20	1 42	1,373 43	50
						345.50	582.20	1 47	782 83	16
Number of contracts, 14.						4,882.00	7,812.40	1 528	\$11,006 32	340

0.92-1.00 miles.

Cedar blocks taken up, 803 3-10 lineal feet.

**RECAPITULATION OF STREET PAVING CONSTRUCTED DURING
FISCAL YEAR ENDING APRIL 18, 1898, AT NOON, NOT
INCLUDING ANNEXED TERRITORY.**

Material Used.	No. of Con- tracts.	Lineal Feet.	Miles	Square Yards.	Cost.	Aver- age Cost per Sq. Yd.	No. of Bills.
Barber Trinidad Lake As- phalt	18	18,672.20	2.59	48,492.70	\$91,895 76	\$2 12	594
Parker-Washington Trini- dad Asphalt							
American Bituminous Rock (Gilson) Asphalt	6	10,019.10	1.90	84,447.90	70,248 96	2 04	855
Vitrified Brick	29	24,995.48	4.73	84,890.50	117,824 10	1 51	1166
Macadam	8	14,806.10	2.80	55,892.00	58,000 82	1 047	487
Total	51	68,492.88	12.02	217,668.10	\$337,969 64		2632

**STATEMENT OF STREETS PAVED TO APRIL 18, 1898,
NOT INCLUDING ANNEXED TERRITORY.**

Material Used.	Total Lineal Feet Constructed.	Lineal Feet Taken Up and Repaved.	Lineal Feet Constructed at Time of this Statement.	Miles.
Asphalt	211,027.80		211,027.80	89.97
Vitrified Brick	125,677.48	1,980.00	123,747.48	28.44
Cedar Blocks	279,952.00	26,908.00	78,044.00	18.78
Stone or Granite Blocks	15,091.00	*3,211.00	11,880.00	2.12
Macadam	121,926.00	12,811.00	109,615.00	20.76
*Reconstructed.	753,678.73	224,900.00	629,818.73	100.07

In addition to the above, there is constructed in annexed territory: Trinidad Lake Asphalt, 80,200 lineal feet, 7.48 miles; Macadam, 160,870 lineal feet, 30.37 miles.

STATEMENT OF ALLEYS PAVED TO APRIL 18, 1898.

Material Used.	Total Lineal Feet Constructed.	Lineal Feet Taken Up.	Lineal Feet Constructed at Time of this Statement	Miles.
Vitrified Brick	13,159 00		13,159 00	2 49
Stone Blocks	3,753 20	296 00	3,457 20	0 68
Cedar Blocks	2,011 00	687 20	1,323 80	0 25
Macadam	1,600 00		1,600 00	0 31
	20,523 20	983 20	19,540 00	3 71

Not Including Annexed Territory.

Date Constructed.		Barber Trinidad Lake Asphalt.						Parker-Washington Trin. Lake Asp.						Amer. Bitum. Rock (Gilson) Asphalt.						Vitrified Brick.					
From	To	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Sq. Yard.	Lineal Feet.	Mi.	Square Yards.	Cost.	Average Cost per Sq. Yard.	Lineal Feet.	Mi.	Square Yards.	Cost.	Average Cost per Sq. Yard.	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost per Sq. Yard.				
Jan. 1, 1889	May 9, 1890	2,570.00	0.486	7,645.63	\$21,407.76	\$2.80																			
May 9, 1889	Apr. 30, 1890	10,764.30	2.04	40,244.77	112,688.96	2.80																			
Apr. 30, 1890	Apr. 20, 1891	4,307.00	0.80	15,631.40	48,800.92	2.765																			
Apr. 20, 1891	Apr. 18, 1892	15,126.00	2.86	57,110.80	144,298.71	2.526																			
Apr. 18, 1892	Apr. 17, 1893	12,804.15	2.85	48,168.80	124,117.04	2.576																			
Apr. 17, 1893	Apr. 16, 1894	29,046.10	5.51	99,443.50	257,080.35	2.585																			
Apr. 16, 1894	Apr. 1, 1895	27,221.70	5.16	118,460.26	306,754.62	2.64																			
Apr. 15, 1895	Apr. 20, 1896	34,717.75	6.57	129,612.78	329,791.36	2.544																			
Apr. 20, 1896	Apr. 19, 1897	43,166.70	8.17	151,928.00	382,175.81	2.186	1,253.60	0.24	4,138.80	\$8,822.79	\$2.018														
Apr. 19, 1897	Apr. 18, 1898	13,672.20	2.60	43,492.70	91,895.76	2.118						10,019.10	1.90	3,447.90	70,248.96	2.10									
							445.00		2,049.20	\$5,123.00	\$2.60						8,526.00	0.667	18,256.72	\$27,056.86	\$2.041				
																	6,682.50	1.27	24,079.80	40,390.62	1.677				
																	9,534.95	1.80	84,829.80	57,557.74	1.649				
																	82,116.10	6.08	118,962.60	195,184.96	1.647				
																	13,181.40	2.49	45,977.80	61,914.79	1.846				
																	10,157.70	1.92	85,464.40	48,719.25	1.907				
																	33,128.60	4.88	82,452.50	117,224.40	1.421				
																	24,995.43	4.73	84,380.50	117,824.10	1.397				

Comparative Statement of Street Pavement Constructed from January 1, 1889, to April 18, 1898.—Continued.

Date Constructed		Stone Blocks.					Cedar Blocks.					Macadam.					Totals.				
From	To	Lineal Feet	Miles	Square Yards	Cost	Average Cost Per Sq. Yard	Lineal Feet	Miles	Square Yards	Cost.	Average Cost Per Sq. Yard	Lineal Feet	Miles	Square Yards.	Cost.	Average Cost Per Sq. Yard	Lineal Feet.	Miles.	Square Yards.	Cost.	Average Cost Per Sq. Yard
Jan. 1, 1889	May 9, 1889	1,173.00	0.222	5,079.57	\$10,527.12	3.253	39,674.97	7.135	146,722.14	\$208,407.08	\$1.421	1,027.00	0.194	4,088.70	\$2,746.18	\$0.67	8,507.00	0.680	11,744.38	\$ 24,153.89	\$2.040
May 9, 1889	Apr. 30, 1890	2,655.80	0.500	7,915.80	23,074.80	2.915	14,001.70	2.820	50,394.00	71,100.78	1.412	546.00	0.100	2,705.00	1,161.30	0.42	53,137.27	10.004	215,852.70	934,874.83	\$4.320
Apr. 30, 1890	Apr. 30, 1891	774.30	0.140	3,054.70	7,850.91	2.572	1,334.20	0.260	4,572.00	6,767.80	1.490	8,825.80	1.67	24,253.50	32,889.91	0.958	22,855.50	4.320	78,756.00	144,287.89	\$1.20
Apr. 30, 1891	Apr. 18, 1892											14,643.03	2.62	50,207.70	37,510.46	0.747	32,742.00	6.20	128,071.79	232,157.04	\$1.83
Apr. 18, 1892	Apr. 17, 1893											14,656.15	3.50	74,001.00	63,945.47	0.864	82,420.35	15.00	133,200.80	219,185.24	\$1.65
Apr. 17, 1893	Apr. 16, 1894											6,837.60	1.29	21,772.00	19,587.02	0.899	49,500.85	9.30	302,845.20	522,485.65	\$2.24
Apr. 16, 1894	Apr. 15, 1895	329.50	0.06	1,208.80	3,077.84	2.47	2,008.15	0.39	8,481.00	9,090.03	1.05	12,908.60	2.32	65,739.20	49,814.42	0.804	59,252.64	11.21	195,980.46	408,024.20	\$3.40
Apr. 15, 1895	Apr. 20, 1896	1,087.70	0.20	6,865.00	9,035.83	1.40	600.50	0.11	1,702.00	1,973.44	1.12	24,120.50	4.57	121,842.60	78,900.04	0.645	101,670.40	17.38	224,405.78	439,934.80	\$3.90
Apr. 20, 1896	Apr. 19, 1897											14,286.10	2.80	55,302.00	58,000.82	1.047	63,492.83	12.02	300,851.90	536,683.04	\$1.80
Apr. 19, 1897	Apr. 18, 1898																		217,603.10	837,769.64	\$3.85

B—Stone Blocks Repairs. C—Cedar Blocks Repaired.

Natural Stone Curbing Constructed During Fiscal Year Ending April 18, 1898, at Noon.

Street.	Side.	From	To	Thickness	Constructed by Owners.			Constructed by Public Contract.			Total Constructed.		No. of Tax Bills.
					Lineal Feet.	Price. Cents.	Cost.	Lineal Feet.	Price. Cents.	Cost.	Lineal Feet.	Amount.	
Bellevue ave	Both.	Twentieth st	Twenty-first st	5	495.00	49½	\$ 232 65	916.00	49½	\$ 453 73	1,411.00	\$ 686 38	31
Charlotte st	"	Eighth st	Ninth st	5				556.00	44½	248 81	556.00	248 81	24
Harrison st	"	Eighteenth st	Nineteenth st	5	100.00	42	42 00	811.30	42	340 75	911.30	332 75	15
Lydia ave	"	Fifteenth st	Eighteenth st	5	1,400.00	43½	609 00	1,047.00	43½	455 44	2,447.00	1,064 44	21
Charlotte st	"	Sixteenth st	Eighteenth st	5	955.00	44	420 20	109.00	48	8 72	1,863.00	754 08	23
Lydia ave	"	Eleventh st	Twelfth st	5	655.00	46	301 80	739.00	44	325 16	1,394.00	355 58	1
Washington st	"	Fourteenth st	Sixteenth st	5	587.00	43	230 91	118.00	46	54 28	773.00	355 58	5
Nineteenth st	"	Baltimore ave	Broadway	5				322.30	43	134 59	859.30	369 50	84
Seventeenth st	"	Brooklyn ave	Olive st	5				2,184.50	45½	999 41	2,184.50	999 41	8
Central st	"	Seventeenth st	Twentieth st	5				1,151.50	44½	515 28	1,151.50	515 28	8
Baltimore ave	"	Twenty-ninth st	Thirty-first st	5	610.00	64	582 46	2,329.00	49	1,141 21	2,329.00	1,141 21	60
Locust st	East.	Missouri ave	Independence ave	5				1,541.66	64	936 79	2,161.66	1,569 26	9
Central st	Both.	Twentieth st	S. W. Boulevard	5				191.50	53				8
Fifteenth st	"	Baltimore ave	Broadway	5	100.00	46½	46 50	181.50	19	125 90	373.00	135 90	38
Fifth st	"	Woodland ave	Olive st	5	1,646.00	45½	753 04	220.00	49½	108 90	230.00	108 90	44
Eighteenth st	"	Main st	Baltimore ave	5	867.00	48½	178 00	1,991.00	46½	925 82	2,001.00	972 82	1
Eighteenth st	"	Holly st	West Prospect Pl	5	164.50	79	129 95	30.00	8	2 40	3,549.00	1,612 57	3
Minnie ave	"	Garfield ave	Olive st	5	1,211.00	46½	563 11	1,874.50	45½	857 13	476.00	230 86	6
Virginia ave	"	Twelfth st	Fourteenth st	5	675.00	45	303 75	104.00	48½	52 86	1,749.00	787 05	37
Wyandotte st	"	Seventeenth st	S. W. Boulevard	5	50.00	45	22 50	490.50	79	387 49	1,907.50	858 38	62
Goodrich Pl	"	Wyandotte st	Broadway	5				22.00	9	1 08	1,393.00	725 04	24
Campbell st	East.	Twentieth-ninth st	South Line Beacon Hill Park Add	5	237.00	45	106 65	301.00	46½	139 97	237.00	106 65	7
Charlotte st	Both.	North Line Beacon Hill Park Add	South Line Beacon Hill Park Add	5	484.26	49	237 28	441.16	49	216 17	926.41	453 45	12
Cherry st	"	Independence ave	Eighth st	5				199.83	15	29 97	244.33	76 45	27
Indiana ave	"	Twelfth st	Fifteenth st	5	600.00	50	300 00	84.50	55	46 48	2,163.20	1,203 90	71
Lydia ave	"	Twelfth st	Fifteenth st	5	341.00	44½	151 74	50.00	10	5 00	2,476.16	1,084 16	28
Sixteenth st	"	Woodland ave	Olive st	5				2,085.16	44½	927 30	3,748.40	2,155 33	10
Tenth st	"	Alley West of Broadway	Summit st	5	227.00	50	118 50	171.40	18	30 92	592.20	270 13	8
Twenty-ninth st	"	Cherry st	Troost ave	5	1,646.00	52	865 92	1,356.30	52	705 27	3,002.30	1,571.19	4
Sixteenth st	"	Liberty st	Wyoming st	5				570.00	51½	298 35	570.00	248 85	14
Mercer Pl	"	Eighteenth st	Cliff st	5	1,600.00	50	800 00	650.50	78	507 39	2,250.50	1,307 39	28
Robert's st	"	Indiana ave	Bales ave	5	250.00	50	125 00	1,099.00	52½	501 22	1,099.00	561 22	32
Thirteenth st	"	Woodland ave	Euclid ave	5				872.00	56	488 76	1,122.00	613 76	8
Brooklyn ave	"	Lexington ave	Pendleton ave	5	245.00	50	122 50	820.30	57	467 57	820.30	467 57	40
Park ave	"	Twenty-fifth st	Twenty-sixth st	5	200.00	50	100 00	1,087.00	51½	534 05	1,282.00	656 55	33
Michigan ave	"	Sixteenth st	Eighteenth st	5	408.00	50	231 44	1,487.90	53	788 58	1,667.90	888 58	38
Morrell ave	"	Walrond ave	Bales ave	5		56½		1,807.20	56½	1,025 58	2,215.20	1,257 02	48
Indiana ave	"	Seventeenth st	Thirty-first st	5	4,000.00	60	2,400 00	6.00	10	60			241
Twentieth st	"	McGee st	Holmes st	5	530.00	50	260 00	11,778.29	64½	7,508 99	15,784.29	9,907 59	8
Holmes st	"	Independence ave	Eighth st	5	560.00	60½	390 60	530.00	51½	272 95	1,110.00	562 95	3
								173.50	9	15 61	2,087.60	1,351 01	48
								1,354.10	60½	944.80			
40 Contracts.					30,343.05		\$ 10,649 58	53,597.70		\$ 28,909 52	73,080.95	\$ 39,619 05	1,181
					Amounts forward								

Natural Stone Curbing Constructed During Fiscal Year Ending April 18, 1898.—Continued.

Street.	Side.	From	To	Thickness Inches	Constructed by Owners.			Constructed by Public Contract.			Total Constructed.		No. of Miles
					Lineal Feet.	Price Cts.	Cost.	Lineal Feet.	Price Cts.	Cost.	Lineal Feet.	Amount.	
Amounts Forward		40 Contracts			20,943.05		\$10,649.53	53,537.70		\$24,949.52	73,980.95	\$39,619.05	1141
Fourteenth st	Both.	Woodland ave	Park ave										
Olive st		Eighteenth st	Belt Ry. Bridge	5	925.50	50	463.25	1,071.80	55	919.21	2,751.20	1,806.26	16
Twenty-fifth st	North	Lydia ave	Tracy ave	5	750.00	50	375.00	235.50	58	165.59	1,035.50	540.59	7
Woodland ave					300.00	50	150.00				300.00	150.00	
Euclid ave	Both	Ninth st	Tenth st	5	105.00	50	247.50	35.50	10	8.55	700.80	343.50	5
Robert's st		Seventh st	Eighth st	2				629.00	57	390.44	629.00	360.44	12
Twenty-ninth st		Walrond ave	Bales ave	5	470.00	50	235.00	767.25	55	421.98	1,257.25	656.98	18
Highland ave		Locust st	Cherry st	5	136.00	50	68.00	489.40	51	249.04	634.40	317.04	8
Bell st		Twelfth st	Fifteenth st	5	1,000.00	50	500.00	1,281.00	54	691.74	2,281.00	1,191.74	52
		N side 31st. West-											
		port city limits	Thirty-second st	5	400.00	50	200.00	490.70	12	52.40	1,827.80	817.32	56
Twentieth st		Mercier st	Holly st	5	520.00	70	364.00	991.10	57	564.92	1,827.80	817.32	4
Twenty-first st		Charlotte st	Campbell st	5	300.00	50	150.00	442.00	74	82.73	631.80	446.73	5
Bell st		Southwest Blvd	Thirty-first st	5	175.00	50	87.50	210.40	66	292.81	742.90	442.81	6
Eighteenth st		Holly st	Mercer Place	5	400.00	80	320.00	113.00	52	109.40	385.40	196.90	1
Sixth st		Prospect ave	Walrond ave	5	300.00	50	150.00	3,109.76	89	100.57	513.00	420.57	75
4 contracts	17.23 miles	Average cost, 33.5 cents per foot.			20,515.55		\$13,959.78	64,185.31		\$34,787.95	91,000.86	\$48,697.73	1441

Artificial Stone Combined Curbing and Gutter Constructed During Fiscal Year Ending April 18, 1898.

Street.	From	To	Constructed by Owners.			Constructed by Public Contract.			Total Constructed.		No. of Tax Bills.
			Lineal Feet.	Price.	Cost.	Lineal Feet.	Price.	Cost.	Lineal Feet.	Amount.	
Thirtieth st	Walnut st	Grand ave.....	100.00	\$1 55	\$155 00	470.60	\$1 55	\$729 43	570.60	\$ 884 48	10
Thirtieth st	Warwick Blvd	Oak st	924.00	1 15	1,062 00	648.00	1 15	745 20	1,572.00	1,807 80	12
Broadway	South line 16th st., east of Broadway	South line Twenty-first st				5,128.88	1 00	5,128 88	5,128.83	5,128 83	150
Oak st.....	Thirtieth st	Thirty-first st	65.00	0 90	58 50	1,247.50	0 90	1,122 75	1,812.50	1,181 25	87
Park ave	Ninth st.....	Twelfth st	1,518.00	0 84	1,306 20	723.90	0 84	608 07	2,241.90	1,974 27	20
Euclid ave	Independence ave	Seventh st.....	325.00	0 60	195 00	411.60	0 60	284 00	736.60	479 00	8
Broadway	At { Northwest corner Northeast corner. Southeast corner.	Southwest Blvd ..				140.80	1 40	196 42	140.30	196 42	5
7 contracts. 2.22 miles. Average cost, 99.5 cts. per lineal foot.			2,932.00		\$2,837 80	8,770.73		\$8,814 70	11,702.78	\$11,652 00	242

Street	Side	From	To	Width	Lineal Feet.	Square Feet.	Amount	Lineal Feet.	Square Feet.	Amount	Lineal Feet.	Square Feet.	Amount	Ref. No.
Holmes st	West	Twenty-second st	Twenty-third st	5	115.00	575.00	\$115.00	275.00	1,350.00	\$275.00	291.00	1,455.00	\$291.00	4
Oak st	West	Seventeenth st	Eighteenth st	6	75.00	450.00	94.50	418.00	2,600.00	504.98	523.00	3,133.00	659.98	3
Mossburn ave	North	Grand ave	Alley E. of Grand ave	10	93.33	933.33	224.00				93.33	933.33	224.00	1
Cathedral ave	East	Tenth st	Eleventh st	6	385.42	2,312.50	410.47	25.00	150.00	26.63	410.42	2,462.50	437.10	10
Oak st	East	Seventeenth st	Eighteenth st	6	153.50	921.00	164.20	357.00	2,112.00	425.40	510.50	3,063.00	612.00	5
Oak st	East	N. line of lot 501, block 57, Metcalf's add.	Seventeenth st	6	58.50	352.50	70.50	88.00	516.00	105.20	144.50	898.80	173.76	2
North st	North	Holmes st	Charlotte st	6	135.25	811.50	142.01	135.25	811.50	112.01	270.50	1,623.00	264.02	1
East st	East	Twenty-fifth st	Twenty-sixth st	6	100.50	603.00	179.50	75.50	471.00	80.49	299.30	1,435.90	299.29	4
W. Third st	South	Oak st	Locust st	5	111.26	667.50	165.70	175.00	875.00	166.25	296.26	1,431.30	271.95	4
Market st	West	Sixteenth st	Seventeenth st	12	49.50	594.00	112.50	297.00	3,564.00	677.16	346.50	4,158.00	790.02	4
Lydia ave	Both	Twenty-third st	Twenty-fourth st	5	633.54	3,267.00	580.01	300.00	1,000.00	177.50	853.54	4,267.00	757.51	1
Sixteenth st	South	W. Industrial st	Baltimore ave	6	216.50	1,299.00	253.52	180.00	1,000.00	146.40	256.50	1,779.00	320.22	3
Seventh st	East	Eighteenth st	Twentieth st	5	320.00	1,753.00	315.54	237.50	1,187.00	213.75	589.10	2,940.00	529.29	9
Twenty-fifth st	Both	Southwest Blvd	West Prospect Place	6	3,215.00	19,295.00	3,232.00				3,215.00	19,295.00	3,332.00	44
Fourteenth st	North	Alley W. of Summit st	Madison ave	6										
Lydia ave	West	Eleventh st	Twelfth st	6	125.00	750.00	150.00			135.00	125.00	750.00	135.00	
Summit st	East	Thirteenth st	Fourteenth st	6	261.53	1,567.64	343.45			414.00	383.23	2,300.00	414.00	
West Ash ave	West	Sixth st	Eight st	5	250.00	1,500.00	255.00	240.00	1,200.00	210.00	478.33	2,750.00	550.00	3
Virginia ave	East	Twelfth st	Thirteenth st	6	250.00	1,500.00	255.00	170.00	1,020.00	193.60	420.00	2,520.00	438.00	8
McJannet ave	East	Twelfth st	Thirteenth st	6	273.30	1,639.80	265.16	600.00	3,600.00	720.00	873.30	5,269.90	1,015.16	10
Rockford ave	North	Cherry st	Holmes st	10	57.16	571.60	114.92	254.40	2,544.00	508.80	311.86	3,118.00	623.42	11
Locust st	West	Whittier Place	Alley S. of Whittier Pl	6	105.00	630.00	122.55				105.00	630.00	122.55	1
Fortieth st	East	Seventeenth st	Eighteenth st	6				602.00	3,612.00	606.28	602.00	3,612.00	606.28	
Fortieth st	North	Forest ave	W. line lot 31, block 11	6										
Lydia ave	North	Lydia ave	Dunder Place	6				107.50	645.00	116.10	107.50	645.00	116.10	
Lydia ave	East	Eleventh st	Alley W. of Lydia ave	5			133.14	146.00	780.00	131.40	146.00	780.00	131.40	
Lydia ave	East	W. line lot 31, block 11	Twelfth st	6	113.80	682.80	191.00	385.00	2,310.00	414.00	385.00	2,310.00	414.00	
Lydia ave	West	N. line lot 31, block 11	Grand ave	6				472.00	3,776.00	755.20	472.00	3,776.00	755.20	
Lydia ave	West	N. line lot 31, block 11	Fifty-two feet S. of Fifty-two feet S. of Independence ave	6				43.00	279.00	75.60	43.00	279.00	75.60	
Lydia ave	North	Lydia ave	Alley W. of Grand ave	10				102.80	1,028.00	205.60	102.80	1,028.00	205.60	
Lydia ave	East	Lydia ave	Twenty-fifth st	5	219.10	1,065.50	246.48			100.00	379.10	1,905.50	406.48	4
Lydia ave	East	Lydia ave	Locust st	6	553.74	3,322.50	708.05			100.00	553.74	3,322.50	508.05	4
Lydia ave	West	Lydia ave	Twentieth st	6	240.00	1,440.00	214.16			444.00	610.00	3,660.00	732.00	6
Lydia ave	West	Lydia ave	Lydia ave	6	108.80	1,190.80	214.16			100.00	298.30	1,700.80	322.16	8
Lydia ave	East	Lydia ave	Seventeenth st	6	625.70	3,754.20	732.06			720.00	1,225.70	7,354.20	1,452.06	13
Lydia ave	West	Lydia ave	Twenty-fifth st	5	264.54	1,322.70	244.60			111.00	398.54	1,942.70	356.29	6
Lydia ave	West	Lydia ave	Locust ave	6	554.87	3,241.26	631.63			520.56	1,638.87	6,133.25	1,155.39	6
Lydia ave	East	Lydia ave	Seventeenth st	6	617.20	3,703.20	722.12			740.00	1,233.87	7,103.20	1,162.12	6
Lydia ave	East	Lydia ave	Howard ave	5	245.00	1,225.00	227.45			256.50	530.00	2,654.50	483.95	8
Lydia ave	Both	Twenty-fifth st	Southwest Boulevard	6	765.00	4,590.00	549.49			720.00	1,423.33	8,504.00	1,560.40	24
Lydia ave	South	Lydia ave	Lydia ave	5	321.30	1,606.50	297.20			617.50	606.30	4,481.50	814.70	2
Lydia ave	East	Lydia ave	Twenty-fifth st	6	519.00	3,117.00	541.16			524.00	819.00	4,917.00	965.16	5

					12,074.60	70,604.62	\$12,908.50	10,628.66	65,689.00	\$12,550.11	22,718.55	130,293.62	\$25,657.61	1230
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Hexagon Bloc

Street	Side	From
Walnut st	East	Thirteenth st
Cherry st	East	Twenty-sixth
Grand ave	East	Fourteenth st
Holmes st	West	Fifth st
Campbell st	East	Fourteenth st
Sevenside st	South	McGee st
Thirtieth st	Both	Granday (Main side Walnut
Independence	Both	N. of St. John
Charlotte st	West	Eight st
Eleventh st	North	Flora ave
Mum st	Both	Garfield ave
Park ave	Both	Ninth st
Michigan ave	East	Thirteenth st
Euclid ave	Both	Independence
Twelfth st	North	Woodland ave
Locust st	East	Fifteenth st
Broadway	Both	Sixteenth st

Brick Sidewalks Constructed During Fiscal Year Ending April 18, 1898.

Street.	Side.	From	To	Constructed by Public Contract				Constructed by Property Owners				Total Constructed.		No. of Joists on %.	
				Lineal Feet	Square Feet	Cost pr. ft. Cts.	Amount.	Lineal Feet.	Square Feet.	Cost pr. ft. Cts.	Amount.	Lineal Feet.	Square Feet.		Amount.
Holly st	Both	Eighteenth st	Twentieth st	288.00	1,728.00	94	\$199.82	885.00	5,310.00	94	\$511.00	1,173.00	7,038.00	677.41	8
Independence ave	North	Oak st	Locust st	312.00	2,813.50	9	253.22					312.00	2,813.50	253.22	1
Massena ave	South	Oak st	Locust st	274.12	2,741.20	9	246.71					274.12	2,741.20	246.71	1
Locust st	East	Sixth st	Eight st	75.00	450.00	94	41.63	520.00	3,120.00	94	288.60	565.00	3,570.00	830.23	2
Thirty first st	North	Cherry st	Holmes st					60.00	360.00	9	32.40	60.00	360.00	32.40	
Holmes st	East	Pacific st	Independence ave					280.00	1,280.00	9	108.00	280.00	1,280.00	108.00	
Brady ave	East	Southwest Blvd	Twenty second st					66.00	66.00	94	38.00	66.00	66.00	38.00	
Bellevue ave	Both	Twentieth st	Twenty first st	504.00	3,028.00	94	287.60	730.00	4,434.00	94	421.23	1,243.00	7,662.00	706.60	15
Sixth st	Both	Locust st	Cherry st	324.00	1,944.00	94	184.08	324.00	1,944.00	94	184.08	648.00	3,888.00	599.36	2
Eighteenth st	North	Garfield ave	Park ave	100.00	600.00	8.74	52.44	475.00	2,850.00	8.74	249.00	575.00	3,430.00	301.53	3
Eighteenth st	South	77 feet E. of Pros pect ave	Chestnut ave	48.00	288.00	8.74	25.17	375.00	2,250.00	8.74	195.65	423.00	2,538.00	221.82	2
Eighteenth st	Both	Michigan ave	Garfield ave	317.50	1,905.00	8.49	161.73	850.00	5,100.00	8.49	432.60	1,167.50	7,065.00	594.72	8
Twentieth st	North	produced Alley E. of Bath more ave	olive st	31.00	186.00	8.90	16.72	250.00	1,500.00	8.90	134.85	281.00	1,686.00	151.57	1
Twentieth st	Both	Woodland ave	Wyandotte st	136.00	816.00	8.90	73.36					136.00	816.00	73.36	2
South eighth st	Both	Marion st	Prospect ave	1,297.50	7,665.00	8.24	626.65					1,297.50	7,665.00	626.65	80
South eighth st	Both	Marion st	Grand ave	285.00	1,410.00	8.90	126.76	765.00	4,280.00	8.90	392.28	940.00	5,040.00	549.04	2
Locust st	West	Twentieth st	Southwest Blvd	648.50	3,651.00	9	328.50	1,755.00	10,530.00	9	147.70	2,303.00	14,451.00	1,276.29	24
Locust st	East	Independence ave	Eight st	61.54	369.25	8.19	31.35	904.00	5,424.00	8.19	160.50	965.54	5,763.25	491.85	1
Locust st	East	Independence ave	Sixth st					350.00	2,100.00	94	194.25	350.00	2,100.00	194.25	
Locust st	East	South eighth st	Twentieth st					600.00	3,000.00	114	352.50	600.00	3,000.00	352.50	
Locust st	West	Seventh and bath st	A point 74 ft south of bath st					75.66	454.00	16	72.64	75.66	454.00	72.64	
Locust st	East	Eighteenth st	South eighth st	1,826.41	14,011.50	8.85	1,307.71	450.00	2,700.00	9	243.00	450.00	2,700.00	243.00	
Cherry st	Both	Marion st	Park ave	152.00	912.00	8.85	50.71	3,816.00	20,528.00	9	2,717.52	5,642.41	15,130.30	4,055.23	29
Cherry st	Both	Independence ave	Sixth st	179.13	1,074.80	8.74	163.50	400.00	2,400.00	9	216.00	552.00	3,312.00	246.71	7
Cherry st	West	Twenty first st	Twenty second st	25.00	150.00	104	15.75	1,856.00	11,136.00	8	860.88	2,035.13	12,210.90	964.88	6
Cherry st	Both	Park ave	olive st	2,224.70	13,348.20	9	1,201.36	254.00	2,124.00	104	223.02	379.00	2,274.00	288.77	1
Cherry st	Both	Twenty sixth st	Twenty seventh st	165.00	990.00	11	108.90	3,042.00	23,652.00	9	2,128.68	6,166.75	37,000.50	3,330.04	50
Cherry st	Both	Seventh and Pros pect ave	Seventh and Pros pect ave					650.00	3,900.00	10	300.00	615.00	3,900.00	495.00	6
Cherry st	Both	Woodland ave	Park ave	145.00	870.00	8.74	78.03	140.00	840.00	8	67.20	285.00	1,710.00	143.26	9
Cherry st	Both	Woodland ave	Michigan ave	120.00	720.00	104	81.90	174.00	1,044.00	10	104.40	304.00	1,824.00	146.30	6
Cherry st	Both	Woodland ave	Lydia ave	144.72	868.32	104	91.17	144.72	868.32	10	104.40	240.44	1,776.04	178.00	6
Cherry st	Both	Twentieth st	Twenty third st	124.50	747.00	104	78.43					124.50	747.00	78.43	
Cherry st	Both	Brady ave	Grand ave	254.50	2,105.50	8.85	190.10	1,068.00	6,348.00	8.85	501.70	1,106.50	6,454.00	747.95	3

Brick Sidewalks Constructed During Fiscal Year Ending April 18, 1898—Continued.

Street	Side	From	To	Constructed by Public Contract.				Constructed by Property Owners.				Total Constructed.			No. of Tax
				Lineal Feet	Square Feet	Cost pr ft.	Cts.	Lineal Feet	Square Feet	Cost pr ft.	Cts.	Lineal Feet	Square Feet	Amount.	
Holly st	West	Eighteenth st	Allen ave	88.20	2,229.20	125	125	480.00	2,460.00	124	124	518.20	2,100.20	868.65	2
Sixth st	North	Curry st	Holmes st	101.00	1,061.00	105	105	304.00	3,040.00	10	10	666.00	2,890.00	849.00	3
Eighteenth st	North	Clark ave	Prospect ave	225.00	1,285.00	8	7-10	117.15	2,428.10	10	10	226.00	1,860.00	117.45	9
Walnut st	West	Twentieth st	Sixteenth st	118.85	1,080.00	23	23	200.85	7,090.00	12	12	914.20	9,148.00	1,120.00	6
Harrison st	West	Garfield ave	Clark ave	100.00	1,000.00	8	8-10	55.10	450.00	9	9	554.00	2,800.00	320.40	8
Campbell st	Both	Eighteenth st	Nineteenth st	200.00	1,000.00	5	5	180.45	1,000.00	10	10	430.00	2,630.00	260.40	7
Washington st	Both	Fifth st	Independence ave	725.00	1,410.38	9	9-10	1,400.00	8,100.00	10	10	2,185.00	12,810.88	1,976.64	19
Nichigan ave	Both	Sixth st	Eighteenth st	404.07	2,128.00	14	14	1,850.00	3,090.00	10	10	1,014.67	6,198.00	700.62	15
Broadway	East	Sixteenth st	Sixteenth st	380.00	2,380.00	10	10	381.23	2,287.40	12	12	1,715.00	10,410.00	1,041.00	16
Cherry st	West	Washington st	60 ft N of Sixth st					26.00	1,400.00	94	94	361.25	2,287.40	189.00	
Holmes st	West	Missouri ave	Pennsylvania ave	70.00	420.00	18	18	544.00	1,464.00	9	9	244.00	1,464.00	141.76	8
Locust st	East	Missouri ave	Independence ave					530.00	2,400.00	10	10	468.34	2,420.00	276.00	
Twentieth st	South	McClellan st	60 Lawrence Ave	483.63	2,403.00	8	8-10	15.75	274.30	9	9	45.75	274.30	24.71	
Nineteenth st	South	Locust st	Holmes st	57.00	57.00	14	14	1,040.00	9,000.00	9	9	2,043.81	12,500.00	1,104.94	3
Holmes st	Both	Eighteenth st	Cherry st	175.00	954.00	14	14	141.67	1,020.00	10	10	287.00	1,962.00	192.76	2
Locust st	Both	Fifth st	Nineteenth st	108.80	1,052.80	8	8-10	700.00	1,200.00	10	10	285.67	1,774.00	251.82	1
Oak st	West	Seventeenth st	Nineteenth st	214.00	1,407.00	8	8	1,400.00	1,000.00	10	10	676.00	5,200.00	510.82	6
Campbell st	East	Eleventh st	Nineteenth st	101.00	600.00	8	8	1,360.00	5,840.00	9	9	1,074.50	10,947.00	804.96	9
Eighteenth st	South	115 feet E. of I	ave	185.00	515.00	8	8-10	280.00	1,200.00	10	10	434.34	2,696.00	260.80	4
Bellevue ave	Both	Garfield ave	ave	115.00	690.00	14	14	200.00	1,200.00	10	10	315.00	1,900.00	167.37	6
Walnut st	Both	Twentieth st	st st	36.00	210.00	8	8-10	19.19	1,200.00	10	10	36.50	210.00	19.40	1
Walnut st	Both	Fourteenth st	st st	579.00	4,474.00	8	8-10	14.25	1,200.00	10	10	26.00	150.00	19.40	1
Fourth st	Both	Sixteenth st	st	287.00	1,722.00	8	8-10	1,054.81	6,820.00	9	9	844.00	6,104.00	474.81	16
Flora ave	Both	Olive ave	ve	137.20	823.20	8	8-10	60.15	4,164.00	10	10	1,345.34	8,072.00	714.42	7
Sixteenth st	North	Nineteenth st	st	101.00	500.00	11	11	480.00	2,040.00	10	10	861.20	4,067.20	486.85	1
McClellan st	West	Charlottesville	st	80.00	180.00	11	11	1,020.00	1,020.00	10	10	360.00	2,600.00	258.75	4
				729.00	4,377.00	9	9	284.02	1,560.00	9	9	979.60	5,677.00	629.02	20
65 contracts. 10.11 miles. Average cost per square foot, .004 cents.				10,182.30	182,979.20			30,680.81	87,277.81			58,460.60	867,579.42	981,707.64	403

Plank Sidewalks Constructed During Fiscal Year Ending April 18, 1898, at Noon.

Street.	Side.	From	To	Const'd by Pub. Cont.				Const'd by Prop. Owners				Total Constructed.		No. of Bills
				Lineal Feet.	Cost per Lineal Foot Cents	Lineal Feet	Cost.	Lineal Feet	Cost.	Lineal Feet	Cost.	Lineal Feet.	Cost.	
Walrond ave	West	Twenty-third st	Twenty-fourth st	440.51	29 1/2	\$145.63				440.51	\$145.63			15
Indiana ave	East	Independence ave	Ninth st	815.50	27 9/10	227.53		342.00	\$95.42	1,157.50	\$222.95			5
Twenty third st	South	Fairmount ave	Alley West of Fairmount ave	121.00	29 1/2	36.00				121.00	36.00			1
Eighth st	North	Indiana ave	East line Hanna's Add	105.00	29 1/2	30.71		230.00	60.08	341.00	90.74			2
Walrond ave	East	Twenty-fourth st	Twenty-fifth st	706.00	29 1/2	235.10				706.00	235.10			27
Holly st	East	Twenty-first st	S line lot 50, Wheatland's Add	177.00	29 1/2	52.84		150.00	41.62	327.00	97.46			7
Twenty-fifth st	South	W end Turkey Creek bridge, Fairmount ave	East side State Line st	1,126.86	27 9/10	314.30				1,126.86	314.30			10
Vine st	West	N line Weston's Add	Pacific st	255.00	29 1/2	76.04				255.00	76.04			7
Thirty-first st	North	Grand ave or Main st	Baltimore ave	309.20	29 1/2	91.96				309.20	91.96			2
Fairmount ave	West	Twenty-third st	Benton Place	52.00	30	15.00		175.00	52.50	227.00	68.10			2
Roberts st	North	Bales ave	Askew ave	376.65	29 1/2	112.06				376.65	112.06			9
Locust st	West	Thirty-sixth st	Thirty-seventh st	441.00	30	132.30				441.00	132.30			9
12 contracts. 1 13-100 miles. Average cost per lineal foot, 29 cents.				5,006.86		\$1170.17		103.00	\$261.57	5,009.86	\$1731.71			96

Repairs First-Class Sidewalks and Curbing During Fiscal Year Ending April 18, 1898.



Repairs Second-Class Sidewalks During Fiscal Year Ending April 18, 1898, at Noon.

District.	New Lumber. Feet B. M.	Old Lumber Feet B. M.	Grading Cubic Yards.	Total Cost.	No. of Bills.
District No. 1	228,544.00	121,862.00	46.00	\$4,669 70	1,047
District No. 2	192,688.00	200,963.00		4,455 51	867
District No. 3	262,067.00	237,514.00		6,036 10	1,370
	678,299.00	659,339.00	46.00	\$15,361 31	3,284

Alleys Graded During Fiscal Year Ending April 18, 1898.

Between or Location	From	To	Cubic Yards Earth.				Cubic Yards Stone.		Drain Pipe.			Total Cost.	No. of Bills.
			Excava- tion.	Price per Yard Cts	Embank- ment	Price per Yard Cts	Excava- tion.	Price per Yard Cts	Size.	Lineal Feet.	Price Per Foot.		
Immediately S. of Eighteenth st	Flora ave	Vine st	315.40	25					Cn. Yds. Bldg. Wall	212	Per Yard, \$3.30	184	15
Twentieth st and Matthew s ave	Walton ave	College ave	150.00	26 1								26	27
McCoo st and Oak st	Eight st	Ninth st	201.40	36								120	60
Lyla ave and Tracy ave	24th st	25th st			1,880.00	14 1						275	68
McCoo st and Oak st	Twelfth st	Thirteenth st	60.00	38								25	68
	N line cor'd d												
Summit st and Jefferson st	Flat Roberts ad	fourteenth st	33.00	60								32	67
Park ave and Olive st	Sixth st	Eight st	222.10	25								144	44
Holmes st and Charlotte st	22nd st	23rd st	2,633.60	16								121	30
Cherry st and Holmes st	24th st	26th st			12,864.10	18						2,320	94
Immediately N. of Twelfth st	Euclid ave	Garfield ave	529.20	22								116	4
McCoo st and Oak st	Fifteenth st	Twelfth st	152.90	25								38	23
McCoo st and Oak st	fourteenth st	Fifteenth st	238.00	27								63	12
Oak st and Locust st	Eleventh st	Twelfth st	67.50	30								20	25
Main st and Walnut st	Sixth st	Seventh st	247.10	26								64	65
14 contracts	108.100 miles		5,187.20		14,783.10					212		\$3,859.19	321

Sodding and Planting Trees During Fiscal Year Ending April 18, 1898.

Street	Side	From	To	Trees.				Sodding.			Total Amount.	Number of Tax Bills.
				Number.	Cost Each	Square Feet	Cost per Sq. Foot	Amount.	Cost per Sq. Foot	Amount.		

John
John

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Miscellaneous Public Work Constructed During Fiscal Year Ending April 18, 1898. Paid for by Voucher.

Contractor.	Date.	Specifications.	Amount.	Total Amount.
A. J. Armstrong G. Geiger	Apr. 30, 1897	Building retaining wall on 15th st., near Walrond ave.	\$12 00	\$172 80
	May 25, 1897	Stone crossing at Summit st. and Southwest Boulevard	29 41	
		Stone crossing at 15th st. and Lydia ave	20 47	
Barber A. P. Co. Barber A. P. Co. Barber A. P. Co. J. J. Armstrong	May 1, 1897	Stone crossing at Independence ave. and Walrond ave		92 00
	July 31, 1897	Repairing asphalt pavement on Wall st., between 7th st. and 8th st.		20 00
	March 31, 1897	Repairing sidewalks at Market House		154 40
	March 31, 1897	Repairing asphalt pavement at intersection of Olive st. and 14th st., \$27 49 Half		13 75
	Aug. 15, 1897	Repairing plank sidewalk at workhouse, west side Woodland ave. from Belt Line Bridge to 21st st		12 04
G. Geiger G. Geiger	Dec., 1897	Stone crossing at 24th st. and Southwest Boulevard	21 85	31 00
	Jan. 8, 1898	Stone crossing at Lydia ave. and 21th st.	64 28	
	Jan. 8, 1898	Stone crossing at 15th st. and Park ave	28 15	
Peter Guenther	Feb. 21, 1898	Stone crossing at 15th st. and Michigan ave	34 00	139 84
	Feb. 21, 1898	Stone crossing at Southwest Boulevard and Broadway	27 00	
	Feb. 21, 1898	Stone crossing at 15th st. and Virginia ave	27 00	
	Feb. 21, 1898	Stone crossing at 15th st. and Euclid ave	27 00	
	Feb. 26, 1898	Stone crossing at 15th st. and Prospect ave	54 28	112 08
	Feb. 26, 1898	Resetting stone crossing at 15th st. and Prospect ave	3 50	
				\$750 01

Miscellaneous Public Work Constructed During Fiscal Year Ending April 18, 1898. Authorized by Ordinance.

Contractor.	Ordinance. No.	Date Approved	Specifications.	Amount.	Total Amount.
The Gillette, Herzog Mfg. Co. Fred Feigel Keating & Forrester E. M. Walton H. S. Trestrail	8499	Aug. 9, 1897	Constructing a highway bridge on Park ave., over the K. C. Belt Railway.	\$2,467 00	\$2,477 50
	8499	Aug. 9, 1897	For rock at east end of bridge	10 50	
	8495	Sept. 11, 1897	Con. stone wall along W. line of Brook st. at its intersection with Turkey Creek	2,909 70	3,083 30
	8495	Sept. 11, 1897	Constructing hand railing along westerly line of Brook st	33 00	
	9298	Jan. 18, 1898	Resetting curbing, both sides Michigan ave., from 16th to 18th st.		
					\$5,000 00

Petitions Canvassed During Fiscal Year Ending April 18, 1898.

Building petitions for permits, for construction of buildings, etc.	280
Paving petitions and remonstrances. Selection of material	170
Sidewalks. Selection of material. Remonstrances, etc.	180
Miscellaneous. Re-establish grades, etc.	68

Street Paving Under Contract at close of Fiscal Year Ending April 18, 1898, at Noon.

Asphalt.

Street.	From	To	Prevent Forming	Kind of Asphalt.	Thickness, Inches.	Foundation.	Approximate Estimate.			
							Lineal Feet.	Square Yards.	Cost Per Sq. Yard.	Total Cost.
Euclid ave	South line Twelfth st.	North line Fifteenth st	None.	American bit. rock	2	8 inches concrete	1,122.00	5,025.00	\$2 10	\$10,542 00
Fourteenth st	East line Woodland ave	West line Park ave	None.	American bit. rock	2	8 inches concrete	1,340.00	4,064.00	2 10	8,518 40
Gladstone ave	South line Independence ave	North line Ninth st	None.	American bit. rock	2	8 inches concrete	1,184.00	3,421.00	2 10	7,184 10
Highland ave	South line Twelfth st	North line Fifteenth st	None.	American bit. rock	2	8 inches concrete	1,425.00	3,462.00	2 10	8,384 60
Indiana ave	South line Seventh st	North line Ninth st	None.	American bit. rock	2	8 inches concrete	642.00	1,909.00	2 10	3,990 00
Montgall ave	Independence ave West line	East Fifth st East line	None.	American bit. rock	2	8 inches concrete	1,400.00	4,006.00	2 10	8,412 60
Sixteenth st	Summit st East line	Bellevue ave West line	None.	American bit. rock	2	8 inches concrete	555.00	1,901.00	2 10	3,992 10
Smart ave	Waltond ave North line	Indiana ave South line	None.	American bit. rock	2	8 inches concrete	505.00	1,618.00	2 10	3,297 80
Troost ave	Highth st	Sixth st	Cedar Blks.	American bit. rock	2	8 inches concrete	466.40	1,477.80	2 10	3,102 83
4 Contracts	1 77.100 Miles.						9,070.00	27,890.00		\$57,518 98

Street Paving Under Contract at close of Fiscal Year Ending April 18, 1898, at Noon.
Brick.

Street.	From	To	Former Pavement.	Spaces Between Brick.	Foundation.	Approximate Estimate.			
						Lineal Feet.	Square Yards.	Cost Per Sq. Yard.	Total Cost.
Anderson ave.	East line Woodland ave	West line Indiana ave	None.	Portland Cem. Grout.	2 in. sand, 6 in. concrete.	594.00	1,281.00	\$1 49½	\$1,915 10
Bales ave.	North line Independence ave	South line St. John ave	None.	Portland Cem. Grout.	2 in. sand, 6 in. concrete.	2,593.00	8,315.00	1 49	12,349 35
Charlotte st	South line Eighteenth st	North line Nineteenth st	None.	Portland Cem. Grout.	2 in. sand, 6 in. concrete	445.00	1,801.10	1 44½	2,622 59
Lexington ave	East line Walrond ave	West line Indiana ave	None.	Portland Cem. Grout.	2 in. sand, 6 in. concrete	593.63	16,27.00	1 49½	2,432 37
Smart ave	East line Indiana ave	West line Monroe st	None.	Portland Cem. Grout.	2 in. sand, 6 in. concrete.	1,208.00	4,910.00	1 49½	7,310 45
Broadway	South line Twenty-first st	South line Twenty-third st	None.	Portland Cem. Grout.	2 in. sand, 6 in. concrete	655.70	3,421.00	1 29½	4,489 20
Thirteenth st	East line Flora ave	West line Woodland ave	None.	Portland Cem. Grout	2 in. sand, 6 in. concrete	779.00	2,715.00	1 45	3,933 75
7 Contracts.	1 30 Miles.					6,839.50	24,270.10	\$1 45½	35,805 81

Alley Paving Under Contract at close of Fiscal Year Ending April 18, 1898, at Noon.
Brick.

Between	From	To	Former Pavem't.	Spaces Between Brick.	Foundation.	Approximate Estimate.			
						Lineal Feet.	Square Yards.	Cost Per Sq. Yd.	Total Cost.
McGee st. and Oak st.	11th st	12th st	None.	Port. Cem. Grout.	2 in. sand, 6 in. concrete	376.90	653.10	\$1 59	\$1,038 43
Oak st. and Locust st.	11th st	12th st	None.	Port. Cem. Grout.	2 in. sand, 6 in. concrete	378.30	428.10	1 59	680 68
2 Contracts.	14-100 Miles.					755.20	1,081 20	\$1 59	\$1,719 11

Natural Stone Curbing Under Contract at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street	Side	From	To	Thickness in Feet	Approximate Estimate.				
					Rect and Redress		New Curb		Total Cmt.
					Lineal Feet	Price Cents	Lineal Feet	Price Cents	
Brooklyn ave	Both	Minnie st	Amie st	5		11	752 (M)	49½	\$ 872 24
Anderson ave	Both	Waltrond ave	Indiana ave	5		10	1,187 (M)	51.4	646 58
College ave	Both	Twelfth st	Fifteenth st	5	35.50	9	2,715.50	49½	1,372 65
Charlotte st	Both	Eighteenth st	Nineteenth st	5	117.30	12	620 (M)	49½	821 87
Forest ave	Both	Twenty-ninth st	Thirty-first st	5		12	200 (M)	49	96 (M)
Gladstone ave	Both	Independence ave	Ninth st	5		10	1,300 (M)	69½	742 50
Lexington ave	Both	Waltrond ave	Indiana ave	5			1,117.83	51.4	574 44
Madison ave	Both	Thirteenth st	Fourteenth st	5		12	425 (M)	52½	223 12
Montgall ave	Both	Independence Bvd	Fifth st	5			2,000 (M)	51½	1,428 50
Seventh st	Both	Wexlland ave	Garfield ave	5		10	1,000 (M)	69½	706 (M)
Smart ave	Both	Indiana ave	Monroe st	5		12	2,400 (M)	54	1,206 (M)
Smart ave	Both	Waltrond ave	Indiana ave	5		10	750 (M)	54	405 (M)
Thirtieth st	Both	Flora ave	Wexlland ave	5	119.00	9	1,132 40	49	712 68
Thompson ave	Both	Waltrond ave	Indiana ave	5			1,250.50	50	626 04
Vine st	Both	Twelfth st	Fifteenth st	5		12	2,200 (M)	55½	1,078 (M)
15 Contracts 3.97-100 Miles.					272 40		20,734.83	50 (9-10)	\$10,007 37

Artificial Stone Combined Curb and Gutter Under Contract at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street	Side	From	To	Approximate Estimate.			
				Lineal Feet.	Price Per Ft.	Amount.	Remarks.
Independence Bvd	Both	Gladstone ave	East end of Independence Bvd	1,154 (M)	\$ 1 08	\$ 1,246 32	Park Board.
The Pisco	West	Fifteenth st	Prolongation East of S. line of Lot 13, Blk 1, H. W. Armfield's add.	1,400 (M)	1 06½	1,491 25	Park Board.
The Pisco	West	Thirteenth st	Fifteenth st	1,085 (M)	1 07	1,161 15	Park Board.
The Pisco	East	Ninth st	Twelfth st	1,475 (M)	1 06½	1,570 41	Park Board.
The Pisco	East	Fifteenth st	Prolongation West of S. line of Lot 11, Blk 2, H. W. Armfield's add.	1,200 (M)	1 07	1,284 00	Park Board.
The Pisco	West	Ninth st	Eleventh st	915 (M)	1 07	979 15	Park Board.
The Pisco	East	Thirteenth st	Fifteenth st	900 (M)	1 06½	958 40	Park Board.
7 Contracts 1.70 Miles				8,249 (M)	\$1.074	\$8,863 11	

Natural Stone Sidewalks Under Contract at close of Fiscal Year Ending April 18, 1898, at Noon.

Street.	Side.	From	To	Approximate Estimate.			
				Linear Feet.	Square Feet.	Per Sq. Ft.	Per Amount.
Grand ave	West	Alley south of	A point 60 feet north of	98.00	698.10	30	\$ 192.00
Olive st	Both	Seventh st	Ninth st	847.64	4,287.70	18	773.16
Pennsylvania ave	West	Seventeenth st	Eighteenth st	118.06	700.00	184	115.60
Pennsylvania ave	East	Eighteenth st	Twenty-first st	1,284.00	7,704.00	184	1,827.07
4 Contracts		.044 Miles		2,344.20	18,993.70	20	\$2,686.73

Artificial Stone and Hexagon Block Sidewalks Under Contract at close of Fiscal Year Ending April 18, 1898, at Noon.

Street.	Side.	From	To	Approximate Estimate.			
				Linear Feet.	Square Feet.	Per Sq. Ft.	Per Amount.
Brooklyn ave	East	Fourteenth st	Fifteenth st	498.00	2,684.00	18c	\$ 472.82
Brooklyn ave	West	Twenty-fourth st	Howard ave	521.00	2,908.00	30	821.00
Charlotte st	Both	Sixteenth st	Eighteenth st	524.00	3,144.00	18c	565.47
Lydia ave	East	Fifteenth st	Sixteenth st	767.00	4,722.00	17 9-10	848.00
Olive st	East	Twenty-first st	Twenty-sixth st	467.00	2,895.00	20	467.00
Park ave	West	Twenty-fifth st	Twenty-sixth st	282.00	1,692.00	17 1/2	280.00
Park ave	East	Twenty-fifth st	Twenty-sixth st	327.00	1,635.00	17 1/2	286.12
The Paseo	West	Fifteenth st	Prolongation R of S. line Lot 18, Block 1, H. W. Armfield's Addition Prolongation R of S. line Lot 41, Block 2, H. W. Prolongation R of S. line	1,198.75	9,558.00	18 4-10	1,787.20
The Paseo	East	Fifteenth st	Prolongation R of S. line	1,992.84	10,280.00	18 9-10	1,909.14
The Paseo	West	Thirteenth st	Thirteenth st		7,640.00	18 9-10	1,418.96
The Paseo	East	Ninth st	Ninth st		7,140.00	19 9-10	1,848.86
The Paseo	East	Thirteenth st	Thirteenth st		7,676.00	20 4-10	1,566.70
The Paseo	East	Ninth st	Ninth st		10,728.00	19 4-10	2,079.68
Tracy ave	West	Sixteenth st	Sixteenth st		1,906.00	30	809.00
Tenth st	North	Olive st	Olive st		2,600.00	30	730.00
Wabash ave	Both.	Lexington ave	Lexington ave		6,130.00	30	608.40
Washington st	Both.	Eighteenth st	Eighteenth st		1,780.00	17 1/2	805.75
17 Contracts		2 2-10 miles.			\$1,756.00		\$18,806.60

Brick Sidewalks Under Contract at close of Fiscal Year Ending April 18, 1898, at Noon.

Street.	Side.	From	To	Width Feet.	Approximate Estimate.		
					Lineal Feet.	Square Feet.	Pr. Per Sq. Ft. Amount.
Baltimore ave	West	Sixteenth st	Southwest Boulevard	6	444.33	2,450.00	\$ 2.10 \$ 200 90
Eighteenth st	Both	Holly st	Alley west of Holly st	6	240.00	1,440.00	11c } 10c 151 90
Highland ave	Both	Twelfth st	Fifteenth st	6	1,288.33	7,710.00	\$ 2-10 672 21
Indiana ave	Both	Fifteenth st	Twentieth st	6	543.33	3,260.00	\$ 2-10 284 80
Locust st	Both	Seventeenth st	Nineteenth st	6	1,674.50	10,047.00	\$ 2-10 808 96
Mercier Place	Both	Holly st	Reservoir ave	6	1,673.00	10,034.00	10 1,004 79
Sixteenth st	South	Summit st	Bellevue ave	6	140.00	840.00	\$ 2-10 74 76
Sixteenth st	North	Holmes st	Charlotte st	6	180.00	720.00	\$ 2-10 68 42
Walnut st	West	Sixteenth st	Twentieth st	6	616.66	3,700.00	\$ 2-10 308 42
9 Contracts	1.27 Miles.	Average Cost, 8.91c Per Sq. Ft.			6,000.15	40,145.00	\$3,654 46

Street Grading Under Contract at close of Fiscal Year Ending April 18, 1898.

Approximate Estimate.										
Street	From.	To	Lineal Feet.	Cubic Yards Earth.		Cubic Yds. Rock.	Drain Pipe.		Miscel.	Total Cost.
				Excava- tion.	Em- bank- ment.		2 1/2 in.	4 in.		
Grove st	Twenty-second st.	Twenty-third st	394.60	1,400.00	1,025.50	91	2 1/2 in.	25		\$ 97 52
Holly st	Twentieth st	Reservoir st	250.00	2,042.00		214	2 1/2 in.			401.00
The Passco Flora ave	Twelfth st	Thirteenth st.	440.00	2,042.00		16	2 1/2 in.			328 72
The Passco Grove st	Eleventh st	Thirteenth st	440.00	4,005.00		10	2 1/2 in.			446 00
Twenty-fourth st	Michigan ave	Brooklyn ave	925.00	4,911.00		12	2 1/2 in.	35		1,241 72
Walush ave	Twenty-second st	Twenty-third st	368 75		2,763.00	144	2 1/2 in.			400 64
6 Contracts.			3,258.35	12,819.00	8,790.50					\$2,914 20

Alley Grading Under Contract at close of Fiscal Year Ending April 18, 1898.

Approximate Estimate.										
Between.	From	To	Lineal Feet	Cubic Yards Earth.			Rock.		Miscellaneous.	Total Cost.
				Exca- vation.	Em- bank- ment.	Gravel.	Cubic Yards.	Feet		
Grand ave. and McGee st	Eleventh st	Twelfth st	416.50	497.70	30		359.80	30		\$257 10
Walnut st. and Grand ave	Twelfth st	Thirteenth st	433.81	620.00	10					62 00
Walnut st. and Grand ave	Independence ave.	Sixth st	433.81		536.50	9				48 29
: Contracts.			1,284.18	1 117.70	536.50		359.80			\$347 39
0.24-100 Miles.										

Planting Trees Under Contract at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street.	Side.	From	To	Approximate Estimate.			
				Trees No.	Price Each.	Cost.	Total Cost.
Wabash Avenue.	Both.	Fifteenth Street.	Eighteenth Street.	22	\$5 90	\$129 80	\$129 80
							\$129 80

Public Sewers Under Contract at Close of Fiscal Year Ending April 18, 1898, at Noon.

Ordinance Number.	Location.	Approximate Estimate.					
		Pipe Sewer.		Rock Excavation.		Manholes.	
		Eight Inch.					
		Lineal Feet.	Price Per Foot.	Cubic Yards.	Price Per Yard.	Number.	Cost Each.
9214	Alley Between Bellevue Avenue and Madison Avenue North of Sixteenth Street	388.7	.89		.25	2	\$25 00
		388.7					\$201 59
							\$201 59

Miscellaneous Public Work Under Contract Authorized by Ordinance at Close of Fiscal Year Ending April 18, 1898, at Noon.

Ordinance No.	Specifications.	Approximate Estimate.				Appropriation.	Amount Paid to Date.	Balance of Appropriation.
		Earth Exc.		Rock Exc.				
		Cu. Yds.	Price	Cu. Yds.	Price.			
6147	Grading Summit Street from Twenty-ninth St. to Southern City Limits. (Thirty-first St.)	7,464	.16	40,684	.86	\$16,851 48	\$5,616 79	\$10,883 21

1,224 Lineal Feet.

Recapitulation of Public Work Constructed During Fiscal Year Ending April 18, 1898, at Noon.

Page No.	Nature of Work.	No. of Contr't	Cu. Yds.	Sq. Yds.	Sq. Feet.	Lineal Ft.	Miles.	No. of Bills.	Amount.
1-3-5	Paving streets	51		217,668.10		63,492.83	12.02	2,382	\$337,969 64
4	Paving alleys	14		7,842.00		4,882.00	.92	340	11,946 32
7-8	Natural stone curbing	54				91,000.86	17.23	1,441	48,697 78
8	Artificial stone combined curb and gutter	7				11,702.00	2.22	242	11,652 00
10	Hexagon block and artificial stone sidewalks	29			162,805.25	22,781.00	4.31	231	32,120 00
9	Natural stone sidewalks	41				22,713.55	4.30	289	25,557 61
11-12	Brick sidewalks	65				53,409.60	10.11	401	31,707 54
13	Plank sidewalks	12				5,969.88	1.13	95	1,731 74
13	Repairs, first-class sidewalks and curbing	1						214	2,143 78
13	Repairs, second-class sidewalks	3						8,284	15,351 31
14	Grading streets	26	138,431.80			32,277.28	6.11	2,060	30,769 45
15	Grading alleys	14	19,850.80			5,693.44	1.08	321	8,859 19
15	Sodding and planting trees (No. trees, 79)	3			11,963.20			71	1,071 68
16	District sewers	9				46,654.20	8.68	2,088	118,730 15
17	Public sewers	8				3,293.70	.62		17,304 19
18	Miscel. public work, paid for by voucher	17							750 01
18	Miscel. public work, authorized by ord.	8							5,409 80
									\$907,014 07

Recapitulation of Public Work Under Contract at Close of Fiscal Year Ending April 18, 1898, at Noon.

Page No.	Nature of Work.	No. of Contr't	Cubic Yards.	Square Yards.	Square Feet.	Lineal Feet	Miles.	Amount.
19	Asphalt, paving streets	9		27,349.90		9,070.60	1.77	\$57,518 98
19	Brick, paving streets	7		24,270.10		6,839.50	1.30	85,305 81
19	Brick, paving alleys	2		1,081.20		755.20	.14	1,719 11
20	Natural stone curbing	15				21,007.28	8.97	10,697 87
20	Artificial stone combined curb and gutter	7				8,249.00	1.56	8,863 14
21	Natural stone sidewalks	4			18,601.70	2,844.20	.44	2,506 72
21	Artificial stone and Hexagon block sidewalks	17			81,755.00	11,619.96	2.20	15,536 60
22	Brick sidewalks	9			40,195.00	6,009.15	1.27	8,654 46
22	Grading streets	6	18,672.50			8,254.35	.62	2,914 20
22	Grading alleys	3	2,013.50			1,284.18	.24	867 89
23	Planting trees (22)	1						129 80
23	Public sewers	1						201 59
23	Miscellaneous public work (Grading Summit st)	1	48,298.00					15,864 48
		72						\$155,209 60

Statement of Condemnation Cases During Fiscal Year Ending April 18, 1898, at Noon.

No.	Date Approved	Street	From	To	Verdict Rendered			In Notes			Remarks
					Municipal Court	Circuit Court	Kansas City	Property Owners			
2215	Mar 6, 1896	Walton av	S. L. Barnard Place add	Fifteenth st	Sept 7, 1896			2,131.00	Complete Oct 6, 1897		
2220	Mar 16, 1896	Montrose av	St John av	Smart av		Jan 28, 1896	1.00	1,011.00	Collecting		
2224	Apr 15, 1896	Alley bet St L & P av	Turner & Co's add	W L, 1st 6th & N H 2nd		June 19, 1896	1.00		Damages assessed to benefit		
2227	Apr 20, 1896	Main st	A point 47 65 ft N of Tenth st	Tenth st		July 14, 1896	1.00	6,954.00	Complete Aug 2, 1897		
2236	May 15, 1896	Twenty-fourth st	Lowest st	E L, W L & E L, S N T 1st R ad		June 2, 1896	1.00	7,119.00	Collecting		
2240	July 2, 1896	Fifth st	Lowest av	Highland av		July 25, 1896	1.00	2,549.00	Complete July 7, 1897		
2241	Aug 26, 1896	Duncan av	N L, S N 27 T 20 R 30	S L, S N W, S 27 T 20	Mar 25, 1896		1.00	1,000.00	Complete March 16, 1898		
2242	Nov 21, 1896	Grand av	Twenty-sixth st	W L, S of N L, T 20 S N P Sub	May 21, 1896		1.00	2,929.00	Collecting		
2243	Feb 10, 1896	Thirty-first st	Brooklyn av	Prospect av		Jan 20, 1897	1.00	5,149.00	Complete Jan 6, 1898		
2244	June 6, 1896	Pennington av	Woodland av	A point bet W of Central 1897					Property decided		
2245	June 11, 1896	Thirty-first st	W L, L, N L, S 17 T 10 R 30	Harrison st					Ord No. 254 Apr 21, 1897		
2246	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2247	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2248	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2249	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2250	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2251	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2252	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2253	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2254	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2255	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2256	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2257	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2258	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2259	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2260	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2261	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2262	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2263	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2264	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2265	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2266	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2267	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2268	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2269	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2270	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2271	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2272	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2273	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2274	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2275	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2276	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2277	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2278	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2279	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2280	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2281	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2282	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2283	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2284	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2285	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2286	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2287	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2288	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2289	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2290	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2291	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2292	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2293	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2294	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2295	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2296	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2297	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2298	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		
2299	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Ord No. 794 Dec 19, 1898		
2300	June 11, 1896	Thirty-first st	Woodland av	W L, L, N L, S 17 T 10 R 30					Property decided		

Statement of Grading Cases During Fiscal Year Ending April 18, 1898—Continued.

Ordinance.	No.	Date Approved	Street or Alley.	From	To	Benefits.	
						Date of Trial.	Kan-Prop. sas Own. City.
8254	Apr. 17, 1897		Alley immed. N. of 12th st	Ruelid ave	Garfield ave	Oct. 28, 1897	Complete contract let.
8251	Apr. 9, 1897		Highland ave	Twelfth st	Thirteenth st	June 12, 1897	Complete contract let.
8252	Apr. 9, 1897		Vine st	Twelfth st	Fifteenth st	June 28, 1897	Complete contract let.
8253	Apr. 14, 1897		Eleventh st	Prospect ave	Bellefontaine ave		Pending in circuit court.
8259	Apr. 14, 1897		Alley bet. McGee and Oak st	Twelfth st	Thirteenth st	June 7, 1897	Complete contract let.
8275	May 26, 1897		Twentieth st	Holly st	West Prospect Place		Unanimous petition complete.
8285	June 3, 1897		Rales ave	So line Carlton Place add	Fifteenth st	Nov 27, 1897	Complete contract let.
8287	June 9, 1897		Alley bet. Cherry st. and Holmes st	Twenty-fifth st	Twenty-sixth st		Unanimous petition complete.
8283	June 9, 1897		Alley bet. Walnut and Grand	Twelfth st	Thirteenth st	Dec. 3, 1897	Complete contract let.
8284	June 9, 1897		Alley bet. McGee and Oak st	Fourteenth st	Fifteenth st	Dec. 3, 1897	Complete contract let.
8285	June 9, 1897		Alley bet. Oak and Locust st	Eleventh st	Twelfth st	Dec. 3, 1897	Complete contract let.
8286	June 9, 1897		Alley bet. Walnut and Grand	Independence ave	Sixth st	Dec. 3, 1897	Complete contract let.
8285	June 9, 1897		Alley bet. McGee and Oak st	Eleventh st	Twelfth st	Dec. 3, 1897	Complete contract let.
8286	June 9, 1897		Alley bet. Grand ave. and McGee st.	Twelfth st	Thirteenth st	Dec. 3, 1897	Complete contract let.
8287	Apr. 1, 1897		Summit st	Twenty-ninth st	Southern City limits, 51st st	June 7, 1897	Complete.
8282	June 15, 1897		Garfield ave	Thirtieth st	Thirty-first st	July 13, 1897	Complete contract let.
8285	July 20, 1897		Walrusch ave	Twenty-second st	Twenty-third st	Nov 27, 1897	Complete contract let.
8286	July 20, 1897		Alley bet. 11th and 12th st	Grand ave	McGee st	Dec. 3, 1897	Collecting.
8287	July 23, 1897		Alley bet. Reservoir ave and Cliff st	Holly st	Mercier st	Jan. 8, 1898	Complete contract let.
8288	July 23, 1897		Alley bet. Main and Walnut st	Sixth st	Seventh st	Dec. 3, 1897	Complete contract let.
8289	Aug. 3, 1897		Twenty seventh st	Baltimore ave	Grand ave		No proceedings.
8295	Aug. 3, 1897		Alley immed. N. of 15th st	Agnes ave	Bellefontaine ave	Dec. 3, 1897	Complete.
8296	Aug. 18, 1897		Alley bet. Brooklyn and Park ave	Thirteenth st	Fourteenth st	Dec. 3, 1897	Complete contract let.
8297	Aug. 18, 1897		Alley bet. Harrison and Campbell	Thirteenth st	Fourteenth st	July 9, 1898	Complete July 9, 1898.
8298	Sept. 11, 1897		Reservoir ave	Mercier Place	195 ft. W. of Mercier Place		Rep'led, Ord. 8853, app. Sept. 23, '97
8299	Sept. 17, 1897		Sixth st	200 ft. E. of Chestnut ave	Walrond ave		Rep'led, Ord. 10420, app. July 8, '98
8299	Sept. 22, 1897		Reservoir ave	Holly st	195 ft. W. of Mercier Place	July 9, 1898	Pending in circuit court.

Statement of Grading Cases During Fiscal Year Ending April 18, 1898—Continued.

Ordinance	Date Approved	Street or Alley	From	To	Date of Trial.	Benefits
No						Kan- sas City Prop. Own.
89086	Sept 22, 1897	Alley bet Reservoir ave and Cliff st	Mercier Place	225 feet West of Mercier Place	June 10, 1898	Pending in circuit court
89087	Sept 22, 1897	Alley bet 20th st and Reservoir ave	Holly st	Mercier Place	June 10, 1898	Pending in circuit court
89088	Sept 30, 1897	Locust st	Nineteenth st	400 feet South of 28th st	June 4, 1898	Rep'd Ord 9046 App. Nov 11, '97.
89089	Oct 4, 1897	Holly st	Twentieth st	South line of Reservoir ave		Rep'd Ord 9046 App. Apr. 12, '97.
89090	Oct 14, 1897	Alley bet St John and Morris ave	Alley named East of Walroad av	Bales ave		Pending in circuit court.
89091	Oct 20, 1897	Alley bet Jefferson and Pennsylvania	Fourteenth st	North line of Sixth st	May 21, 1898	Complete
89092	Oct 26, 1897	Cottage Lane	South line Independence ave	Alley named N Twelfth st	July 9, 1898	Complete
89093	Nov 11, 1897	Alley bet Garfield av and Brooklyn	Eleventh st	Reservoir ave		Pending in circuit court
89094	Nov 11, 1897	Alley bet Harrison and Troost av	Tenth st	Alley named N Twelfth st		Unanimous petition, complete.
89095	Nov 11, 1897	Holly st	Twentieth st	Reservoir ave	Jan.	2,257.00 Complete
89096	Nov 11, 1897	Benton Blvd as established by Ord 8734	Twenty-fourth st	Thirtieth st	Mar.	1,500.00 Complete
89097	Nov 11, 1897	Gloucester as established by Ord 8734	Twelfth st	Fifteenth st	Feb.	500.00 Pending
89098	Nov 13, 1897	Hendon Blvd as established by Ord 8734	Fifteenth st	Twentieth st	Feb.	282.50 Complete contract let.
89099	Nov 13, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	Complete contract let
89100	Dec 13, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	Complete July 9, 1898.
89101	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	Pending in circuit court.
89102	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	Pending in circuit court.
89103	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	Complete July 9, 1898.
89104	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89105	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89106	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89107	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89108	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89109	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89110	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89111	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89112	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89113	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89114	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89115	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89116	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89117	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89118	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89119	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89120	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89121	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89122	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89123	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89124	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89125	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89126	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89127	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89128	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89129	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89130	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89131	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89132	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89133	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89134	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89135	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89136	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89137	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89138	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89139	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89140	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89141	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89142	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89143	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89144	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89145	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89146	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89147	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89148	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89149	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89150	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89151	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89152	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89153	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89154	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89155	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89156	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89157	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89158	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89159	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89160	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89161	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89162	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89163	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89164	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89165	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89166	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89167	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89168	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89169	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89170	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89171	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89172	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89173	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89174	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89175	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89176	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89177	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89178	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89179	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89180	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89181	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89182	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89183	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89184	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89185	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89186	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89187	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89188	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89189	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89190	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89191	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89192	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89193	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89194	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89195	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89196	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89197	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89198	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89199	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89200	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89201	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89202	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89203	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89204	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89205	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89206	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89207	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89208	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89209	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89210	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89211	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89212	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89213	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89214	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89215	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
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89217	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89218	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89219	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89220	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89221	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89222	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
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89226	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89227	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
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89229	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
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89231	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
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89233	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89234	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89235	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89236	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89237	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89238	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89239	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89240	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89241	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89242	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89243	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89244	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89245	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89246	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89247	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89248	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89249	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89250	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89251	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89252	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89253	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89254	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89255	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89256	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89257	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89258	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89259	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89260	Dec 22, 1897	El Paso (Flora ave)	Twelfth st	Thirtieth st	Feb.	No proceeding
89261	Dec 22, 1897	El Paso				

**Statement of Expenditures of Engineering Department During
Fiscal Year Ending April 18, 1898, at Noon.**

Pay Roll—			
Engineering department—salaries	\$13,679 04		
Engineering department—horse hire	925 11	\$14,604 15	
Miscellaneous Expense—	\$175 23		
Blue prints	49 94		
Abstracts, grading and condemnation plats, etc.	622 92	\$1,119 09	\$15,753 24

Statement of Streets Paved With Asphalt at Close of Fiscal Year Ending April 13, 1898, at Noon.

Specification			Maintenance		Contractor				Sureties.
Street.	From	To	Accepted.	Expires.	Line 1	Feet	Miller	Square Yards	Contractor
Amie st.	E li Wmash av	W li Prospect	Nov 19, 1896	5 Nov. 10, 1901	461.00		.08	1,282.40	Barber Asp. Co. W. F. Wyman, W. A. Bunker, J. W. Swain.
Bellevue av	Fourteenth st	Sixteenth st	Dec. 6, 1898	5 Dec. 6, 1903	626.00		.12	2,094.50	Barber Asp. Co. J. W. Swain, M. B. Wright
Brooklyn av	Amie st	Independ av	Nov 20, 1899	5 Nov 20, 1904	694.00		.18	2,304.00	Barber Asp. Co. Willard E. Winner, J. W. Swain.
Baltimore av	Sixteenth st	Seventeenth st	Nov 20, 1899	5 Nov 20, 1904	618.00		.16	2,403.20	Barber Asp. Co. J. W. Swain, J. K. Burham.
Brooklyn av	Ninth st	Twelfth st	Jan 18, 1890	5 Jan 18, 1895	1,217.00		.21	4,997.00	Barber Asp. Co. J. W. Swain, J. K. Burham.
Brooklyn av	S. line 9th st	S. line 10th st	Nov 20, 1899	5 Nov. 20, 1901	435.00		.08	1,529.00	Barber Asp. Co. National Surety Co., Hugh J. McGowan.
Broadway	Tenth st	Eleventh st	July 4, 1901	5 July 4, 1906	558.00		.10	2,481.70	Barber Asp. Co. R. W. Moody, W. E. Hall, R. Callaway.
Broadway	Twelfth st	Fourteenth st	Aug 8, 1894	5 Aug 8, 1899	1,182.00		.24	4,941.30	Barber Asp. Co. Hugh J. McGowan, R. M. Snyder.
Broadway	Sixth st	Tenth st	Oct 15, 1895	5 Oct. 15, 1900	1,445.00		.27	5,775.00	Barber Asp. Co. W. C. Glass, Hugh J. McGowan.
Broadway	S. li of 10th st	S. line 21st st	Aug 9, 1897	5 Aug 9, 1902	3,540.40		.92	8,871.20	Gilson Asp. Co American Surety Co. of N. Y. J. F. Halpin.
Brooklyn av	S li of 10th st	N li of 12th st	Aug 21, 1897	5 Aug 21, 1902	684.70		.16	1,876.40	Barber Asp. Co. H. J. McGowan, Joseph Loric, Nat. Sur. Co.
Cherry st	30th st	31st st	Dec. 21, 1891	5 Dec. 21, 1906	8,086.00		.57	12,212.10	Barber Asp. Co. R. Callaway, W. E. Hocker, W. E. Hall.
Campbell st	Eight st	Ninth st	Nov 7, 1901	5 Nov 7, 1906	270.00		.05	980.90	Barber Asp. Co. R. W. Hocker, W. E. Hall, R. Callaway.
Charlotte st	Sixteenth st	Sixteenth st	May 25, 1899	5 May 25, 1899	436.00		.08	1,703.30	Barber Asp. Co. W. E. Hall, R. W. Hocker, Jas. G. Strean.
Central st	Sixteenth st	Seventeenth st	Nov 22, 1895	5 Nov 22, 1900	619.00		.12	1,924.50	Barber Asp. Co. Hugh J. McGowan, W. E. Scarritt.
Central st	Sixteenth st	Sixteenth st	Oct. 25, 1895	5 Oct. 25, 1900	2,134.00		.41	8,828.80	Barber Asp. Co. Hugh J. McGowan, Jos. Loric, W. C. Glass.
Central st	Sixth st	Ninth st	Dec. 24, 1895	5 Dec. 24, 1900	982.00		.17	3,407.30	Barber Asp. Co. G. F. Ballingall, W. C. Glass.
Charlotte st	Twelfth st	Eighteenth st	Dec. 31, 1895	5 Dec. 31, 1900	1,316.00		.25	4,268.40	Barber Asp. Co. W. C. Glass, G. F. Ballingall.
Charlotte st	Sixteenth st	Eighteenth st	Dec. 31, 1897	5 Dec. 31, 1902	940.00		.17	3,102.40	Barber Asp. Co. H. J. McGowan, City S. D. & S. Co. of Phila.
Campbell st	30th st	31st st	22, 1897	5 Sept. 22, 1902	484.00		.08	1,851.30	Barber Asp. Co. H. J. McGowan, Joseph Loric, Nat. Sur. Co.
Delaware st	Fourth st	Hill Park ad.	22, 1897	5 Sept 22, 1902	215.70		.04	686.70	Barber Asp. Co. H. J. McGowan, Joseph Loric, Nat. Sur. Co.
Eighteenth st	Prospect av	Indiana av	12, 1899	5 Oct 13, 1907	1,848.00		.37	6,065.90	Barber Asp. Co. R. Callaway, W. E. Hall, R. W. Hocker.
Eleventh st	Main st	Grand av	25, 1891	5 June 25, 1906	2,679.00		.49	8,598.50	Barber Asp. Co. W. W. Hocker, R. Callaway, J. G. Strean.
Fifth st	Pennsylv av	W. side Jeff'ns st	19, 1892	5 Nov. 19, 1897	480.00		.09	2,026.70	Barber Asp. Co. W. E. Hall, R. W. Hocker, R. Callaway.
Eleventh st	Cherry st	Troost av	14, 1892	5 Oct. 14, 1897	304.00		.06	1,067.90	Barber Asp. Co. W. E. Hall, R. W. Hocker, R. Callaway.
Eighteenth st	Grand av	Woodland av.	0, 1898	5 Oct. 30, 1908	1,584.00		.30	6,568.00	Barber Asp. Co. R. W. Hocker, W. E. Hall, J. G. Strean.
Eleventh st	Garfield av	Olive st	8, 1898	5 Aug. 8, 1904	3,717.00		1.08	12,300.00	Barber Asp. Co. R. W. Hocker, W. E. Hall, J. G. Strean.
			25, 1894	5 May 25, 1900	480.00		.17	8,730.00	Barber Asp. Co. W. L. Scarritt, E. L. Martin, H. J. McGowan.

Statement of Streets Paved with Asphalt at Close of Fiscal Year Ending April 18, at Noon, 1898.

Street	From	To	Specified as Hyd. Cement or Asphalt	Maintenance		Linear Feet	Width Feet	Square Yards	Cubic Feet	Contractor	Sureties
				Accepted	Expire						
North at 4th st	Grand ave	Cherry st	1	Oct. 26, 1904	Oct. 26, 1904	1,211	0.25	302.75	22.50	Harber T. L. A. Co	Hugh J. McGowan, Joseph W. Mercer
North at 4th st	Wyanadale st	Central st	1	Oct. 27, 1904	Oct. 27, 1904	171	0.01	42.75	3.25	Harber T. L. A. Co	Hugh J. McGowan, R. M. Snyder
North at 4th st	Bellevue st	Wyanadale st	1	Oct. 27, 1904	Oct. 27, 1904	200	0.09	50.00	3.80	Harber T. L. A. Co	Hugh J. McGowan, R. M. Snyder
North at 4th st	Bellevue st	Wyanadale st	1	Dec. 1, 1904	Dec. 1, 1904	1,004	0.25	251.00	19.25	Harber T. L. A. Co	Hugh J. McGowan, W. C. Glass, G. F. Ballingal
North at 4th st	Bellevue st	Wyanadale st	1	Dec. 1, 1904	Dec. 1, 1904	8,628	0.72	2,157.00	165.00	Harber T. L. A. Co	City Trust Safe Dep. Co. of Phila., H. J. McGowan
North at 4th st	Main st	Baltimore ave	1	Dec. 20, 1904	Dec. 20, 1904	255	0.05	63.75	4.87	Harber T. L. A. Co	Hugh J. McGowan, W. C. Glass, G. F. Ballingal
North at 4th st	Baltimore ave	Wyanadale st	1	Dec. 20, 1904	Dec. 20, 1904	1,412	0.25	353.00	26.87	Harber T. L. A. Co	National Surety Co, Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 20, 1904	Dec. 20, 1904	1,102	0.25	275.50	20.94	Harber T. L. A. Co	Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	June 25, 1907	June 25, 1907	1,497.20	0.70	374.30	28.74	Harber T. L. A. Co	Hugh J. McGowan, National Surety Co.
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	July 25, 1907	July 25, 1907	1,131.40	0.21	282.85	21.82	Harber T. L. A. Co	Joseph Lorie, The Fidelity Dep. Co. of Maryland.
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Nov. 25, 1907	Nov. 25, 1907	1,104.20	0.03	276.05	21.30	Gilson Asphalt Co	Mississippi Valley Trust Co
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 20, 1904	Dec. 20, 1904	1,571.00	0.20	392.75	30.30	Harber Asphalt Co	W. P. Wyman
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	June 16, 1906	June 16, 1906	3,074.00	0.78	768.50	59.44	Harber Asphalt Co	K. Burnham, M. B. Wright, R. M. Tanner
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Nov. 16, 1907	Nov. 16, 1907	2,977.00	0.03	744.25	57.30	Harber Asphalt Co	K. Hocker, W. F. Hall, R. Callaway
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Apr. 27, 1904	Apr. 27, 1904	2,940.00	0.01	735.00	56.63	Harber Asphalt Co	Hugh J. McGowan, Robt. Snyder
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 2, 1904	Dec. 2, 1904	2,872.00	0.01	718.00	55.45	Harber Asphalt Co	Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Sept. 22, 1904	Sept. 22, 1904	2,827.00	0.13	706.75	54.75	Harber Asphalt Co	City T. S. D. & S. Co
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 20, 1904	Dec. 20, 1904	2,782.00	0.10	695.50	53.57	Harber Asphalt Co	Robt. Snyder, J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Nov. 10, 1904	Nov. 10, 1904	3,000.00	0.09	750.00	57.00	Harber Asphalt Co	Robt. Snyder, J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Feb. 6, 1906	Feb. 6, 1906	1,306.00	0.20	326.50	25.16	Harber Asphalt Co	National Surety Co., Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 10, 1904	Dec. 10, 1904	911.00	0.17	227.75	17.50	Harber Asphalt Co	Hugh J. McGowan, W. C. Glass
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	May 31, 1904	May 31, 1904	1,717.00	0.22	429.25	32.45	Harber Asphalt Co	Am. Surety Co., Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	June 16, 1904	June 16, 1904	3,042.00	0.01	760.50	57.75	Harber Asphalt Co	Hugh J. McGowan, Robt. Snyder
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Nov. 21, 1904	Nov. 21, 1904	830.00	0.16	207.50	15.80	Harber Asphalt Co	of Maryland, H. J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 18, 1904	Dec. 18, 1904	292.00	0.01	73.00	5.50	Harber Asphalt Co	W. C. Glass, G. F. Ballingal
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Nov. 19, 1904	Nov. 19, 1904	841.00	0.11	210.25	16.27	Harber Asphalt Co	Am. Co., Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Aug. 9, 1904	Aug. 9, 1904	2,778.00	0.10	694.50	53.50	Harber Asphalt Co	Joe. Lorie, R. B. Joffer, Hugh J. McGowan
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Mar. 10, 1907	Mar. 10, 1907	3,000.00	1.12	750.00	57.00	Harber Asphalt Co	Fidelity & Dep. Co. of Maryland, Nat'l Surety Co.
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	May 8, 1907	May 8, 1907	290.00	0.15	72.50	5.50	Gilson Asphalt Co	American Surety Co. of N. Y., Julius Nachman
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	Dec. 2, 1904	Dec. 2, 1904	710.00	0.16	177.50	13.75	Harber Asphalt Co	Jas. K. Burnham, J. W. Swain, W. P. Wyman
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	May 12, 1904	May 12, 1904	1,225.00	0.22	306.25	23.25	Harber Asphalt Co	G. F. Ballingal, W. C. Glass
North at 4th st	West line of Bellevue st	West line of Bellevue st	1	June 15, 1904	June 15, 1904	600.00	0.12	150.00	11.25	Harber Asphalt Co	W. F. Hall, W. H. Coker, J. G. Streat

Statement of Streets Paved with Asphalt at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street.	From	To	Specification			Accepted.	Maintenance.		Lineal Feet.	Miles.	Square Yards.	Cost per Sq Yd.	Contractor.	Sureties.
			Asphalt Inches	Bituminous Conc. Inch.	Hyd. Cem. Conc. Inch.		Year	Expi- ring						
Holmes st.	Eighth st.	Twelfth st	1½	1½	4	Oct. 16, 1896	5	Oct. 16, 1901	1,549.00	0.29	5,068.80	\$2 12	Barber Asphalt Co.	Fid. and Dep. Co. of Maryland, H. J. McGowan.
Holmes st	Twelfth st	Fifteenth st	2		4	July 31, 1894	5	July 31, 1899	1,419.00	0.27	5,424.50	2 50	Barber Asphalt Co.	W. L. Scarritt, E. L. Martin, H. J. McGowan.
Harrison st.	Eighth st.	Tenth st	1½	1½	4	Dec. 8, 1895	5	Dec. 8, 1900	785.00	0.15	2,481.80	2 50	Barber Asphalt Co.	H. J. McGowan, W. C. Glass, G. F. Ballingal.
	West line	East line												{ H. J. McGowan, R. W. Hocker,
Independ. ave.	Grand ave	Highland ave	2	1½	5	Nov. 24, 1893	5	Nov. 24, 1898	5,075.00	0.96	17,061.90	2 80	Barber Asphalt Co.	{ J. G. Streat, W. E. Hall.
Independ. ave	Walnut st	Grand ave	2	1½	Old	Dec. 1, 1893	5	Dec. 1, 1901	278.00	0.04	1,111.20	2 24	Barber Asphalt Co.	American Surety Co., H. J. McGowan.
Independ. ave.	Highland ave	Woodland ave.	2	1½	6	Nov. 17, 1893	5	Nov. 17, 1898	625.00	0.12	2,488.00	2 80	Barber Asphalt Co.	H. J. McGowan, R. M. Snyder.
	South line	North line												
Indiana ave	Twelfth st	Fifteenth st	1½	1½	4	Sept. 27, 1897	5	Sept. 27, 1902	1,420.20	0.27	4,609.40	2 12	Barber Asphalt Co.	H. J. McGowan, National Surety Co.
Jefferson st.	Fourteenth st.	Sixteenth st	1½	1½	4	Oct. 22, 1895	5	Oct. 22, 1900	521.00	0.09	1,336.00	2 50	Barber Asphalt Co.	W. C. Glass, H. J. McGowan.
		South line												
Jefferson st	Sixteenth st	Eighteenth st	1½	1½	4	Jan. 9, 1896	5	Jan. 9, 1901	1,572.00	0.29	5,071.90	2 50	Barber Asphalt Co.	H. J. McGowan, W. C. Glass.
Jefferson st	Tenth st	Eleventh st	1½	1½	4	Dec. 31, 1895	5	Dec. 31, 1900	431.00	0.08	1,562.20	2 50	Barber Asphalt Co.	W. C. Glass, G. F. Ballingal.
Locust st	Eighth st	Fifteenth st	1½	1½	Old	Nov. 13, 1894	5	Nov. 13, 1899	2,914.00	0.55	11,311.10	2 50	Barber Asphalt Co.	American Surety Co.
		East line, lot 9												{ H. J. OBrien, G. P. Kirtley, F. P. McCormick,
Lawton Place	Washington st	Lawton Pl. Ad.	1½	1½	4	Jan. 25, 1897	5	Jan. 25, 1902	271.00	0.04	557.50	2 00	Parker, Wash. Co.	{ M. M. Holmes, C. and McR. S. Co., D. McCork
Lexington ave.	Garfield ave	Wabash ave	2	1½	4	Oct. 18, 1895	5	Oct. 18, 1900	1,159.00	0.22	3,445.30	2 50	Barber Asphalt Co.	H. J. McGowan, Joseph Lorie, W. C. Glass.
Lydia ave	Twelfth st	Fifteenth st	1½	1½	4	Oct. 11, 1897	5	Oct. 11, 1902	1,372.30	0.26	4,788.70	2 12	Barber Asphalt Co.	H. J. McGowan, City T. S. D. & S. Co. of Phila.
McGee st	Twelfth st	Nineteenth st	2½		6	Dec. 31, 1899	5	Dec. 31, 1894	3,137.00	0.59	14,021.40	2 80	Barber Asphalt Co.	Willard E. Winner, J. K. Burnham, C. G. Perrin.
McGee st	Eleventh st	Twelfth st	1½	1½	4	Aug. 9, 1895	5	Aug. 9, 1900	878.00	0.07	1,677.80	2 50	Barber Asphalt Co.	H. J. McGowan, B. B. Joffe, Jos. Lorie.
May st	Fifth st	Sixth st	2½		6	Dec. 4, 1890	5	Dec. 4, 1896	270.00	0.04	1,009.90	2 80	Barber Asphalt Co.	J. K. Burnham, J. W. Swain, M. B. Wright.
Main st.	Missouri ave	Seventh st	2	2	Old	Oct. 14, 1892	5	Oct. 14, 1897	673.00	0.12	2,464.20	2 65	Barber Asphalt Co.	R. Callaway, W. E. Hall, R. W. Hocker.
Michigan ave	Twelfth st	Sixteenth st	1½	1½	4	Dec. 16, 1896	5	Dec. 16, 1901	1,826.00	0.34	5,518.70	2 12	Barber Asphalt Co.	Fid. Dep. Co. of Maryland, H. J. McGowan.
		Center line												
Main st	Seventh st	Twelfth st	2	2	Old	Oct. 26, 1892	5	Oct. 26, 1897	2,011.00	0.38	8,009.20	2 65	Barber Asphalt Co.	R. Callaway, W. E. Hall, R. W. Hocker.
Missouri ave	Walnut st	Locust st	2	2	Old	Oct. 10, 1896	5	Oct. 10, 1901	927.00	0.17	3,279.80	2 12	Barber Asphalt Co.	American Surety Co., H. J. McGowan.
Main st	Third st	Missouri ave	2	2	Old	Nov. 17, 1893	5	Nov. 17, 1898	937.00	0.18	3,506.50	2 65	Barber Asphalt Co.	H. J. McGowan, J. G. Streat, R. M. Snyder.
Minnie st	Garfield ave.	Olive st	1½	1½	4	Sept. 7, 1897	5	Sept. 7, 1902	704.30	0.15	2,485.10	2 12	Barber Asphalt Co.	City T. S. D. & S. Co. of Phila., H. J. McGowan.
	East line	East line												
Ninth st	Broadway	Washington st	2	2	6	June 4, 1896	5	June 4, 1901	460.00	0.08	1,331.10	2 65	Barber Asphalt Co.	Jos. Lorie, B. B. Joffe, H. J. McGowan.
Ninth st	Woodland ave.	Prospect ave	2½		6	Apr. 15, 1889	5	Apr. 15, 1894	2,570.00	0.49	7,645.68	2 80	Barber Asphalt Co.	Jas. K. Burnham, J. W. Swain, W. F. Wyman.
Ninth st	Delaware st.	Broadway	2	1½	Old	July 23, 1892	5	July 23, 1897	1,374.00	0.26	3,642.00	2 65	Barber Asphalt Co.	R. W. Hocker, W. E. Hall, R. Callaway.
	West side													
Ninth st	Oak st	Forest ave	2		4	Sept. 22, 1893	5	Sept. 22, 1898	2,838.00	0.54	11,861.30	2 50	Barber Asphalt Co.	H. J. McGowan, R. W. Hocker, R. M. Snyder.
Ninth st	Forest ave	Lydia ave	1½	1½	4	Oct. 18, 1895	5	Oct. 18, 1900	808.00	0.17	3,359.30	2 50	Barber Asphalt Co	H. J. McGowan, W. C. Scarritt.

Statement of Streets Paved with Asphalt at Close of Fiscal Year Ending April 18, at Noon, 1898.

Street	From	To	Asphalt Inches	Hyd Cond In	Accepted	Veget.	Flags	Maintenance	Miles	Square Yards	Contractor	Surities
East line	East line	East line	12	0	July 17, 1907	5	July 17, 1902		4,980.00	14,263.10	Gibson Asphalt Co.	
Main st.	Main st.	Trace ave	12	0	May 10, 1905	5	May 10, 1904		2,641.00	8,800.00	Barber Asp. P. Co.	
Interpende ave	Interpende ave	Twelfth st	12	4	May 21, 1905	5	May 21, 1904		2,862.00	9,175.10	G. M. Furman	
North St. Bridge	North St. Bridge	20th st	11	4	Nov. 29, 1906	5	Dec. 29, 1906		3,100.00	12,000.00	Barber Asp. P. Co.	
Twelfth st	Twelfth st	Eighteenth st	11	4	Oct. 28, 1905	5	Oct. 28, 1905		1,968.00	5,000.00	Barber Asp. P. Co.	
Eighteenth st	Eighteenth st	Eighteenth st	11	4	Oct. 28, 1905	5	Oct. 28, 1905		1,968.00	5,000.00	Barber Asp. P. Co.	
Twelfth st	Twelfth st	Eighteenth st	11	4	Aug. 9, 1905	5	Aug. 9, 1905		1,968.00	5,000.00	Barber Asp. P. Co.	
Eighteenth st	Eighteenth st	Third st	11	4	Aug. 11, 1907	5	Aug. 11, 1907		1,968.00	5,000.00	Barber Asp. P. Co.	
Third st	Third st	Prospect ave	11	4	Sept. 24, 1905	5	Sept. 24, 1905		4,972.70	11,717.70	Gibson Asphalt Co.	
Prospect ave	Prospect ave	Twelfth st	11	4	Dec. 21, 1902	5	Dec. 21, 1902		2,612.00	8,800.00	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Sept. 19, 1905	5	Sept. 19, 1905		4,308.00	11,800.00	Barber Asp. Co.	H. J. McGowan, R. W. Hocker, W. E. Hall, J. G. Nisraan
Twelfth st	Twelfth st	Twelfth st	11	4	Aug. 9, 1905	5	Aug. 9, 1905		250.00	750.70	Barber Asp. Co.	Joseph Lorie, B. B. Joffe, Hugh J. McGowan.
Twelfth st	Twelfth st	Twelfth st	11	4	Aug. 9, 1905	5	Aug. 9, 1905		110.00	1,001.00	Barber Asp. Co.	Hugh J. McGowan, R. B. Joffe, Joseph Lorie.
Twelfth st	Twelfth st	Twelfth st	11	4	Nov. 5, 1905	5	Nov. 5, 1905		61.00	2,375.61	Barber Asp. Co.	J. W. Swain, M. B. Wright, W. F. Wyman.
Twelfth st	Twelfth st	Twelfth st	11	4	Nov. 5, 1905	5	Nov. 5, 1905		2,400.00	9,311.40	Barber Asp. Co.	G. Perrin.
Twelfth st	Twelfth st	Twelfth st	11	4	Nov. 5, 1905	5	Nov. 5, 1905		1,957.00	7,510.40	Barber Asp. Co.	Swain, Nisraan, Hallway.
Twelfth st	Twelfth st	Twelfth st	11	4	Aug. 9, 1905	5	Aug. 9, 1905		310.00	1,958.40	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Oct. 27, 1904	5	Oct. 27, 1904		1,154.00	4,917.00	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Oct. 27, 1904	5	Oct. 27, 1904		962.00	3,193.10	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Dec. 21, 1904	5	Dec. 21, 1904		472.00	1,685.30	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	July 29, 1907	5	July 29, 1907		1,211.00	4,116.00	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Nov. 21, 1906	5	Nov. 21, 1906		790.00	3,257.61	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Nov. 27, 1906	5	Nov. 27, 1906		316.00	1,283.10	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Nov. 12, 1906	5	Nov. 12, 1906		822.00	1,635.10	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Sept. 24, 1906	5	Sept. 24, 1906		662.00	2,405.00	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Dec. 21, 1906	5	Dec. 21, 1906		3,571.00	13,307.10	Barber Asp. Co.	
Twelfth st	Twelfth st	Twelfth st	11	4	Dec. 21, 1906	5	Dec. 21, 1906		860.00	1,717.30	Barber Asp. Co.	

Statement of Streets Paved with Asphalt in Annexed Territory at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street	From	To	Specification			Maintenance		Total Feet	Miles	Amount Paid	Contractor.	Surities.
			Asphalt 1 1/2 Inches	Br. Gr. 1 1/2 Inches	Hyd. Gr. 1 1/2 Inches	Accepted	Yds.	Feet				
Altitude ave	Hummer ave	Westport ave	1 1/2	1 1/2	1			67000		1225600	Barber Asp. P. Co	Hugh J. McGowan, Joseph Lorie
Altitude ave	Hummer ave	22d st	1 1/2	1 1/2	1			61000		150700	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	23d st	1 1/2	1 1/2	1			53000		155000	Barber Asp. P. Co	W. C. Searritt, W. C. Glass.
Altitude ave	Hummer ave	24th st	1 1/2	1 1/2	1			65300		188700	Barber Asp. P. Co	W. C. Searritt, W. C. Glass.
Altitude ave	Hummer ave	25th st	1 1/2	1 1/2	1			61200		150700	Barber Asp. P. Co	W. C. Searritt, W. C. Glass.
Altitude ave	Hummer ave	26th st	1 1/2	1 1/2	1			61000		208000	Barber Asp. P. Co	W. C. Searritt, W. C. Glass.
Altitude ave	Hummer ave	27th st	1 1/2	1 1/2	1			67300		106000	Barber Asp. P. Co	Hugh J. McGowan, Joseph Lorie.
Altitude ave	Hummer ave	28th st	1 1/2	1 1/2	1			50528		67800	Barber Asp. P. Co	W. C. Searritt, W. C. Glass.
Altitude ave	Hummer ave	29th st	1 1/2	1 1/2	1			571500		2380700	Barber Asp. P. Co	Hugh J. McGowan, R. M. Snyder.
Altitude ave	Hummer ave	30th st	1 1/2	1 1/2	1			153000		120800	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	31st st	1 1/2	1 1/2	1			63000		157800	Barber Asp. P. Co	Hugh J. McGowan, Jas. B. McGowan.
Altitude ave	Hummer ave	32nd st	1 1/2	1 1/2	1			66000		281700	Barber Asp. P. Co	Hugh J. McGowan, R. M. Snyder.
Altitude ave	Hummer ave	33rd st	1 1/2	1 1/2	1			480000		1679000	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	34th st	1 1/2	1 1/2	1			176730		169000	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	35th st	1 1/2	1 1/2	1			34000		102200	Barber Asp. P. Co	Hugh J. McGowan, Jos. Lorie.
Altitude ave	Hummer ave	36th st	1 1/2	1 1/2	1			128000		357000	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	37th st	1 1/2	1 1/2	1			57277		182500	Barber Asp. P. Co	W. C. Searritt, W. C. Glass.
Altitude ave	Hummer ave	38th st	1 1/2	1 1/2	1			191720		571600	Barber Asp. P. Co	Barber Asp. P. Co
Altitude ave	Hummer ave	39th st	1 1/2	1 1/2	1			306850		900000	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	40th st	1 1/2	1 1/2	1			79120		210950	Barber Asp. P. Co	Hugh J. McGowan, W. C. Glass.
Altitude ave	Hummer ave	41st st	1 1/2	1 1/2	1			128800		347300	Barber Asp. P. Co	Hugh J. McGowan, H. H. Anderson.
Altitude ave	Hummer ave	42nd st	1 1/2	1 1/2	1			28170		201830	Barber Asp. P. Co	Will. P. Gaines, W. E. Hall.]
Altitude ave	Hummer ave	43rd st	1 1/2	1 1/2	1			28170		201830	Barber Asp. P. Co	R. Callaway, R. W. Hocker, S. C. Douglass,
Altitude ave	Hummer ave	44th st	1 1/2	1 1/2	1			30228	17 7.43	127507.30		

Statement of Streets Paved With Brick at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street.		From		To		Specification		Maintenance.		Lineal Feet.	Square Yards.	Cost per sq. yd.	Contractor.	Sureties.
Street.		From		To		Bricks	Concrete	Accepted.	Expires.					
Brooklyn ave.		Twelfth st		Thirteenth st.		Sand	6	Sept. 12, 1893.	5 Sept. 12, 1898.	432.00	1053.00	1.799	G. K. Musselman.	J. C. Brown, E. E. Porterfield.
Baltimore ave.		Thirteenth st		Fourteenth st.		Grout.	6	June 11, 1896.	5 June 11, 1901.	447.00	1841.80	1.62	F. P. McCormick.	David McCormick, E. F. Swinney.
Brooklyn ave.		Thirteenth st.		Fifteenth st.		Sand	6	Apr. 27, 1894.	5 Apr. 27, 1899.	991.00	2525.00	1.58	F. P. McCormick.	David McCormick, Gus D. Welch.
Broadway.		N. li. Third st.		South line		Sand	6	Oct. 28, 1896.	5 Oct. 28, 1901.	794.00	4953.00	1.09	F. P. McCormick.	David McCormick, E. F. Swinney.
Broadway.		produced west.		Sixth st.		Sand	6	Sept. 22, 1894.	5 Sept. 22, 1899.	293.00	1187.90	1.24	H. S. Trestrail.	F. G. Trestrail, C. D. French.
Bellevue ave.		Eleventh st.		Twelfth st.		Sand	6	Oct. 29, 1894.	5 Oct. 29, 1901.	628.00	2116.80	1.84	Fred Feigel.	K. Kempf, J. C. Kempf, W. and G. Muehlbach.
Bellevue ave.		Twenty-Third.		24th st.		Sand	4	July 19, 1895.	5 July 19, 1900.	429.00	1758.90	1.49	J. E. Farris.	American Surety Co. [J. O'Brien, G. A. L. Dose.]
Baltimore ave.		Twelfth st.		Thirteenth st.		Sand	6	Sept. 7, 1897.	5 Sept. 7, 1902.	1251.50	8431.10	1.51	Parker-Washn. Co.	F. P. & D. McCormick, G. P. Kirtley, S. U. Bride, H.
Baltimore ave.		Twenty-Ninth		31st st.		Grout.	6	Sept. 27, 1897.	5 Sept. 27, 1902.	610.90	2002.80	1.40	Parker-Washn. Co.	F. P. & D. McCormick, C. & E. L. Marshall, M.
Bellevue ave.		Twentieth st.		21st st.		Sand	6	Oct. 15, 1897.	5 Oct. 15, 1902.	792.80	3999.80	1.42	Parker-Washn. Co.	S. & L. W. Craig. [Stevenston.]
Baltimore ave.		Cent. li. 17 st.		N. li. South-		Grout.	6	Nov. 18, 1897	5 Nov. 18, 1902.	616.80	3517.00	1.40	Fred Feigel	Ambrose Talbott. The Fidelity & Deposit Co. of Maryland.
Baltimore ave.		W. of Balt. ave		west Blvd.		Grout.	6	Mar. 31, 1898	5 Mar. 31, 1903	610.70	2046.20	1.484	M. Mense.	Chas. E. Kollman, W. E. Zahner.
Baltimore ave.		S. li. Sixteenth		Center line		Grout.	6	Mar. 15, 1898	5 Mar. 15, 1903.	746.70	2012.30	1.499	Fred Feigel.	Wm. Muehlbach, Geo. Muehlbach.
Bellevue ave.		First st		23d st		Sand	6	Apr. 13, 1898	5 Apr. 13, 1903.	290.00	816.60	1.344	Parker-Washn. Co.	F. P. McCormick, The Amer. B. & T. Co. Baltmr.
Bell st.		N. city limits		Center line		Sand	6	Aug. 21, 1891.	5 Aug. 21, 1896.	398.00	1622.00	1.575	Peter Purcell	J. Glennon, J. Lillis, F. G. Trestrail, C. A. Chambrln.
Bell st.		of Westport		32nd st		Sand	6	Apr. 24, 1893.	5 Apr. 24, 1898.	484.00	1795.00	1.679	C. L. Powell	T. Brosnahan, W. Weston, R. B. Farley.
Bell st.		Southerly line		Southern		Sand	6	Dec. 1, 1896.	5 Dec. 1, 1901.	875.00	3014.20	1.48	Trestrail Pav. Co.	City Trust & Safe Deposit and Surety Co.
Bell st.		S. W. Blvd.		City Limits		Sand	6	Aug. 27, 1895.	5 Aug. 27, 1900.	1485.00	5194.60	1.485	H. S. Trestrail.	F. G. Trestrail, C. D. French, J. O. French.
Campbell st.		Fifteenth st		Sixteenth st.		Sand	6	Aug. 16, 1897.	5 Aug. 16, 1902.	954.80	8194.00	1.475	M. Mense.	Chas. E. Kollman, William E. Zahner.
Central st.		Ninth st		Tenth st		Sand	6	Sept. 22, 1897.	5 Sept. 22, 1902.	1551.80	6328.50	1.475	M. Mense.	Chas. E. Kollman, W. E. Zahner.
Cherry st.		Twelfth st		Fourteenth st.		Sand	6	Mar. 11, 1898.	5 Mar. 11, 1903.	1124.18	8862.00	1.425	M. Mense.	Chas. E. Kollman, W. E. Zahner.
Cherry st.		Eight st		Twelfth st		Grout.	6	May 22, 1893.	5 May 22, 1898.	527.00	2287.00	1.89	F. G. Trestrail	C. D. French, J. H. Owens.
Cherry st.		Independ. ave.		Twelfth st		Grout.	6	Apr. 21, 1893.	5 Apr. 21, 1898.	561.00	1889.00	1.93	F. P. McCormick.	David McCormick, G. G. Neiswanger.
Charlotte st.		Fifth st		Indpn. ave.		Sand	6	Oct. 10, 1893.	5 Oct. 10, 1901.	646.00	2168.50	1.42	M. Mense.	W. E. Zahner, Charles E. Kollman.
Campbell st.		Second st		Fourth st		Sand	6	Brk. Apr. 25, 1892.	5 Apr. 25, 1897.	814.00	1294.00	1.70	Lillis & Glennon.	James Lillis, W. S. Halliwell.
Delaware st.		Main st		Grand ave.		M. G.	Old	Aug. 8, 1896.	5 Aug. 8, 1901.	1960.00	7951.00	1.234	Trestrail Pav. Co.	National Surety Co.
Eighteenth st.		Olive st.		Prospect ave.		Sand	6	July 21, 1893.	5 July 21, 1898.	1471.00	8880.00	1.49	James O'Donnell.	W. A. Kelly, J. W. Drinkwater, James Burns.
Eighteenth st.		Troost ave		Forest ave.		M. G.	Old	Apr. 15, 1897.	5 Apr. 15, 1902.	285.00	987.10	1.40	M. Mense.	James G. Glennon, E. Beringer, C. E. Kollman.
Eighteenth st.		Woodland ave.		Olive st.		Sand	6							
Fifth st.		Broadway		Main st.		Grout.	6							
Fourth st.		Walnut st.		Grand ave.		Grout.	6							

Statement of Streets Paved with Brick at Close of Fiscal Year Ending April 18, 1898, at Noon—Continued.

Street	From	To	Specification		Accepted	Maintenance		Feet	Miles	Square Yards	Cost Per Square Yard	Contractor	Sureties
			Brick	Concrete		Year	Month						
Fourth st	Delaware st	Main st	Sand	Old	May 18, 1904	5	May 16, 1900	250.00	.03	1,065.00	\$1.30	F. P. McCormick	David McCormick, Gus P. Welch.
Fifteenth st	Pennsylvania ave	Broadway	Sand	4	July 25, 1904	5	July 25, 1900	713.00	.13	2,487.00	1.65	F. P. McCormick	David McCormick, Gus P. Welch.
Seventeenth st	Summit st	Madison ave	Sand	4	Oct 15, 1904	5	Oct 18, 1900	287.00	.05	783.00	1.34	Geo. B. Barclay	Gus P. Welch, F. D. Gordon, D. M. Scott.
Seventeenth st	Eighteenth st	Nineteenth st	Sand	4	Oct 22, 1905	5	Oct 22, 1900	446.00	.08	1,544.00	1.44	Walter Williams	James Lillis, James G. Glennon.
Fourth st	Broadway	Summit st	Sand	4	Feb. 21, 1901	5	Feb. 21, 1901	1,200.00	.23	2,571.20	1.47	G. K. Holmes	M. M. Holmes, Pat Keating.
Fourth st	Broadway	Wyandotte st	Sand	6	Nov. 6, 1901	5	Nov. 6, 1906	742.00	.14	3,031.00	1.65	J. B. Smith & Co	W. W. Sherwin, C. F. Coombs, P. R. Jordan.
Fourth st	Delaware st	Wyandotte st	Sand	Old	July 7, 1902	5	July 7, 1907	200.00	.05	1,043.00	1.65	F. P. McCormick	James I. Gray, David McCormick.
First st	Holmes st	Forest ave	Sand	6	Feb 11, 1902	5	Feb 11, 1907	2,061.00	.30	6,501.00	1.64	Trestle & Brosnahan	W. W. Sherwin, C. L. McDonald.
Seventh st	Twelfth st	Fifteenth st	Sand	6	Sept 21, 1902	5	Sept 23, 1907	1,373.00	.26	4,059.00	1.73	M. Mense	J. N. Miller, N. Miller, Jr.
Seventh st	Forest ave	Forest ave	Sand	6	Dec 20, 1901	5	Dec 20, 1906	287.00	.05	1,119.00	1.68	Trestle & Brosnahan	W. W. Sherwin, D. B. & T. C. Co., W. W. Sherwin.
Fourth st	First st	Fifth st	Sand	6	Nov 27, 1901	5	Nov 27, 1906	1,071.00	.20	3,704.00	1.62	C. L. Powell	David McCormick, Cuthbert Powell, Jas. I. Gray.
Fourth st	Twelfth st	Sixteenth st	As Cem	6	Nov 14, 1906	5	Nov 14, 1901	1,817.00	.35	6,375.00	1.37	R. J. Boyd P & C Co.	Robt. J. Boyd, National Surety Co.
Fourth st	Washington ave	Indiana ave	As Cem	4	Nov 25, 1902	7	Nov 25, 1907	504.00	.11	2,306.00	1.74	F. P. McCormick	David McCormick, G. G. Neiswanger.
Fourth st	Seventh st	Eight st	Sand	6	Apr 21, 1903	5	Apr 21, 1908	314.00	.09	2,125.00	1.20	F. P. McCormick	G. G. Neiswanger, David McCormick.
Fourth st	Indiana ave	Seventh st	Sand	Old	Dec 19, 1903	5	Dec 19, 1908	955.00	.18	5,078.00	1.52	George J. Baer	John B. Ghio, Neal Donnelly, W. G. Ashdown.
Fourth st	Fourth st	Fifth st	Grout	6	July 1, 1906	7	July 1, 1901	532.00	.09	2,207.70	1.27	J. H. Paris	F. G. Trestail, American Surety Co.
Fourth st	Independence av	Twelfth st	Grout	6	Oct 26, 1904	7	Oct 26, 1900	551.00	.10	1,572.10	1.19	H. S. Trestail	F. G. Trestail, C. D. French, J. H. Owens.
Fourth st	Twelfth st	Twelfth st	Mur Grt	4	Apr 29, 1906	7	Apr 29, 1901	829.00	.15	3,105.70	1.53	R. J. Boyd P & C Co.	National Surety Co.
Fourth st	Seventh st	Tenth st	Sand	6	June 20, 1902	7	June 20, 1907	415.00	.08	1,415.00	1.74	C. L. Powell	David McCormick, Cuthbert Powell.
Fourth st	Seventh st	St Louis ave	Sand	6	May 9, 1903	5	May 9, 1908	250.00	.05	980.00	1.57	Geo. J. Baer	Geo. J. Baer, John Galigan, John B. Ghio.
Fourth st	Seventh st	Fifteenth st	Grout	Old	Aug 27, 1905	5	Aug 27, 1900	2,191.00	.41	8,990.50	1.94	J. H. Paris	Gus K. White, M. M. Holmes, James J. Gray.
Fourth st	Seventh st	Eight st	Grout	6	Dec 4, 1907	5	Dec 4, 1902	1,045.00	.41	3,418.10	1.49	H. S. Trestail	F. G. Trestail, National Surety Co.
Fourth st	Seventh st	Ninth st	Sand	6	Apr 1, 1903	5	Apr 1, 1908	302.00	.06	1,263.00	1.74	Geo. J. Baer	John Galigan, John B. Ghio. [G. L. Nellis.]
Fourth st	Seventh st	Fourteenth st	Sand	6	Aug 20, 1902	5	Aug 20, 1907	1,414.00	.27	4,990.00	1.62	Trestle & Brosnahan	R. B. Farley, C. A. Chamberlain, T. A. James.
Fourth st	Seventh st	W. Red	Sand	6	Apr 29, 1906	5	Apr 29, 1901	1,283.00	.24	4,203.10	1.54	Walter Williams	M. Mense, Wm. F. Zahner.
Fourth st	Seventh st	Seventh st	Sand	6	May 6, 1903	5	May 6, 1908	168.00	.08	651.00	1.75	Geo. J. Baer	J. B. Ghio.
Fourth st	Seventh st	Seventh st	Sand	6	Oct 23, 1904	5	Oct 23, 1900	1,007.00	.19	4,312.10	1.74	Walter Williams	James Lillis, James G. Glennon.
Fourth st	Seventh st	Eighteenth st	Sand	Old	Feb 15, 1906	5	Feb 15, 1900	1,417.00	.27	5,543.70	1.23	Walter Williams	James Lillis, James G. Glennon.

Statement of Streets Paved with Brick at Close of Fiscal Year Ending April 18, 1898, at Noon—Continued.

Street	From	To	Specification		Maintenance		Linear Feet	Miles	Square Yards	Cost Per Square Yard	Contractor	Sureties
			Spaces between Brick	Concrete Inches	Accepted	Years	Expires					
Lydia ave	North li. Ninth st.	Twelfth st.	P. C. Grt.	4	June 10, 1897	5	June 10, 1902	1,287.90	1,401.40	\$1.43	M. Mense	Chas. E. Kollman, William E. Zahner.
Lydia ave	South line Fifteenth st	North line of 18th st	P. C. Grt.	6	June 19, 1897	5	June 19, 1902	1,898.40	5,743.20	1.55	Fred Feigel	A. Talbott, The Fidel. & Dep. Co. of Maryland.
Locust st	Eighteenth st	Nineteenth st	Sand	6	Oct. 9, 1897	5	Oct. 9, 1902	446.00	1,707.80	1.55	Fred Feigel	A. Talbott, The Fidel. & Dep. Co. of Maryland.
Michigan ave	Ninth st	Tenth st	Sand	6	Apr. 21, 1896	5	Apr. 21, 1898	387.00	1,312.60	1.74	Jas. O'Donnell	W. A. Kelly, J. W. Drinkwater, James Burns.
Michigan ave	Twenty-first st	23rd st	Sand	6	Sept. 1, 1896	5	Sept. 1, 1901	608.00	2,017.10	1.50	Walter Williams	M. Mense, Wm. E. Zahner.
Michigan ave	Tenth st	Twelfth st	Sand	6	Aug. 8, 1896	5	Aug. 8, 1898	825.00	2,894.00	1.78	Jas. O'Donnell	W. A. Kelly, J. W. Drinkwater, James Burns.
Main st	Nineteenth st	Twentieth st	Sand	Old Jan.	12, 1897	5	Jan. 12, 1902	400.00	2,073.00	1.32	Tim Brosnahan	City Trust Safe Dep & Sure. Co. of Philadelphia.
Main st	Twelfth st	Nineteenth st	Sand	Old Jan.	June 30, 1896	5	June 30, 1898	3,705.00	12,720.00	1.46	Geo. J. Baer	John B. Ghio, John Galligan.
Marcell ave	East line Wal-	West line of Bond ave.	P. C. Grt.	6	Nov. 11, 1897	5	Nov. 11, 1902	1,113.50	3,060.30	1.18	M. Mense	Chas. E. Kollman, W. E. Zahner.
Michigan ave	Sixteenth st	Eighteenth st	Sand	6	Mar. 22, 1898	5	Mar. 22, 1903	897.10	2,575.10	1.36	H. S. Trestrail	F. G. Trestrail, National Surety Co.
Mulberry st	Ninth st	Union ave.	Grout	6	Oct. 15, 1895	5	Oct. 15, 1900	433.00	1,112.60	1.65	J. E. Faris	Gus D. Welch, G. K. White, Jas. J. Gray.
Nineteenth st	Tracy ave	Olive st	Grout	6	Apr. 23, 1897	5	Apr. 23, 1902	3,716.00	10,663.30	1.54	Fred Feigel	Ambrose Talbot, Fidel. & Dep. Co. of Maryland.
Ninth st	Washington av	Pennsylvania ave	Sand	6	May 31, 1895	5	May 31, 1900	258.00	667.20	1.12	James Hamilton	F. P. McCormick, National Surety Co.
Ninth st	Lydia ave	Woodland ave	Mur Grt	6	Apr. 12, 1897	5	Apr. 12, 1902	1,260.00	5,363.40	1.24	M. Mense	Chas. E. Kollman, W. E. Zahner.
Ninth st	Pennsylvania ave	Jefferson st	Sand	6	May 31, 1895	5	May 31, 1900	258.00	612.30	1.42	James Hamilton	F. P. McCormick, Nat. Surety Co.
Nineteenth st	Wyoming st	Genesee st	P. C. Grt.	6	July 13, 1897	5	July 13, 1902	270.70	1,085.50	1.54	Parker-Wash. Co.	F. P. McCormick, D. McCormick, G. P. Kirt-
Oak st	Independence ave	Eighth st	Sand	6	July 1, 1896	5	July 1, 1901	910.00	3,405.40	1.50	Walter Williams	ley, S. U. Bride, H. J. O'Brien, Gus. A. L. Dose.
Oak st	Eighteenth st	Nineteenth st	Sand	6	Dec. 19, 1896	5	Dec. 19, 1901	415.00	1,687.80	1.65	Walter Williams	M. Mense, W. E. Zahner.
Olive st	Eighteenth st	Balt Ry. Br.	Sand	6	Sept. 28, 1897	5	Sept. 28, 1902	580.80	2,155.40	1.85	H. S. Trestrail	M. Mense, Chas. E. Kollman.
Prospect ave	Lexington ave	Independence ave	Sand	6	Nov. 2, 1889	5	Nov. 2, 1894	1,595.00	5,496.00	2.13	Geo. A. Johnson	F. G. Trestrail, National Surety Co.
Park ave	Lexington ave	Independence ave	Asp. Ct	4	Dec. 7, 1892	5	Dec. 7, 1897	1,595.00	5,480.20	1.75	Geo. J. Baer	A. V. McKim, H. H. Stukenberg, Cyrus Near.
Park ave	Independence ave	Ninth st	Asp. Ct	4	Oct. 31, 1892	5	Oct. 31, 1897	1,331.00	4,540.60	1.75	Geo. J. Baer	John Galligan, John B. Ghio.
Park ave	St. John ave	Lexington ave	Sand	4	July 18, 1893	5	July 18, 1898	915.00	3,108.00	1.61	Robt. J. Boyd	John Galligan, John B. Ghio.
Pennsylvania ave	Seventh st	Eight st	Sand	6	Nov. 13, 1894	5	Nov. 13, 1899	312.00	1,076.30	1.25	Walter Williams	Thos. Stinson, L. A. Willard, S. J. Hayde.
Roberts st	East line of In-	West line of diana ave.	Grout	6	Oct. 28, 1897	5	Oct. 28, 1902	403.80	1,273.50	1.50	Parker-Wash. Co.	James Lillis, James G. Glennon.
Sixth st	Broadway st	Delaware st	Asp. Ct	6	Apr. 14, 1893	5	Apr. 14, 1898	1,093.00	4,042.00	1.87	Trestrail & Brosn.	L. Marshall, M. S. Craig, L. W. Craig, G. P. Kirtley.
St. Louis ave	Santa Fe st	Union ave	Sand	6	Dec. 19, 1893	5	Dec. 19, 1898	1,178.00	4,989.00	1.87	Robt. J. Boyd	F. P. McCormick, D. McCormick, C. Marshall, E.
Seventeenth st	Oak st	Flora ave	Asp. Ct	4	Sept. 22, 1894	5	Sept. 22, 1899	3,471.00	11,650.00	1.67	F. P. McCormick	C. D. French, J. H. Owens.
Santa Fe st	St. Louis ave	Union ave	Sand	6	May 22, 1893	5	May 22, 1898	250.00	1,210.50	1.54	J. E. Faris	W. M. Boyd, R. M. Finsminger, C. A. Chamberlain.

Statement of Streets Paved With Brick at Close of Fiscal Year Ending April 18, 1898, at Noen. Continued.

Street		From		To		Specification		Maintenance		Expenses		Linear Feet.		Square Yards.		Cost per sqyd.		Contractor		Sureties	
						Spaces Between Brick		Accepted		Expenses											
Main Street		1400 East		1400 West		As C		May 22 1896		May 22 1896		2168.00		7022.00		1.41		Robt J Boyd		C. A. Chamberlain, R. B. Farley, A. A. Wayland.	
Main Street		1400 East		1400 West		Sand		Sept 22 1896		Sept 22 1896		280.00		148.00		1.73		Robt J Boyd		James B. Smith, W. M. Wright	
Main Street		1400 East		1400 West		Sand		Nov 21 1896		Nov 21 1896		1172.00		3261.00		1.87		Geo J Baer		John Galligan, J. B. Ohio.	
Main Street		1400 East		1400 West		Sand		Nov 24 1896		Nov 24 1896		1580.00		4566.70		1.70		Jas O'Donnell		James Burns, Thos. Reilly	
Main Street		1400 East		1400 West		As C		July 13 1896		July 13 1896		380.00		1068.10		1.60		Chas. Thomas		Gus D. Welch, James J. Gray.	
Main Street		1400 East		1400 West		Comp		Apr 13 1897		Apr 13 1897		1318.00		4761.70		1.50		Boyd P. & C. Co		Robt J Boyd, National Surety Co.	
Main Street		1400 East		1400 West		Sand		Aug 8 1897		Aug 8 1897		426.00		1211.70		1.41		F. P. McCormick		David McCormick, National Surety Co.	
Main Street		1400 East		1400 West		Sand		Dec 22 1897		Dec 22 1897		1790.00		1639.70		1.40		Boyd P. & C. Co		Robt J Boyd, National Surety Co.	
Main Street		1400 East		1400 West		Sand		Apr 23 1898		Apr 23 1898		713.00		2796.40		1.39		James Hamilton		F. P. McCormick, National Surety Co.	
Main Street		1400 East		1400 West		Sand		Dec 16 1897		Dec 16 1897		623.00		1623.00		1.33		F. P. McCormick		David McCormick, E. F. Swinney.	
Main Street		1400 East		1400 West		Sand		Oct 10 1897		Oct 10 1897		130.00		252.40		1.32		F. P. McCormick		Private Contract.	
Main Street		1400 East		1400 West		Sand		Oct 10 1897		Oct 10 1897		1840.00		500.00		1.41		M. Menz		Chas. E. Kollman, W. E. Zahner.	
Main Street		1400 East		1400 West		Sand		Oct 21 1897		Oct 21 1897		710.80		2549.30		1.37		Parker Washin Co		J. M. Sellers, David McCormick, W. H. Stevenson.	
Main Street		1400 East		1400 West		Sand		Oct 21 1897		Oct 21 1897		299.00		804.00		1.36		H. S. Trestrail		E. G. Trestrail, National Surety Co.	
Main Street		1400 East		1400 West		Sand		June 30 1898		June 30 1898		975.00		1800.00		1.70		J. B. Smith & Co		G. F. Coulmer, W. W. Sherwin, Geo L. Nellis.	
Main Street		1400 East		1400 West		Sand		Feb 10 1897		Feb 10 1897		620.00		2125.00		1.70		Lillis & Glenmon		Diamond B. & T. C. Co, J. O'Donnell	
Main Street		1400 East		1400 West		As C		Aug 8 1897		Aug 8 1897		2130.00		806.00		1.48		R. J. Boyd		C. A. Chamberlain, R. B. Farley, Wm. Weston.	
Main Street		1400 East		1400 West		Comp		Apr 23 1897		Apr 23 1897		130.00		2601.30		1.40		G. W. Buzzell		American Surety Co, N. Y. S. K. Faris.	
Main Street		1400 East		1400 West		Sand		Apr 4 1898		Apr 4 1898		101.00		363.00		1.93		Geo J Baer		John B. Ohio, John Galligan.	
Main Street		1400 East		1400 West		Sand		June 13 1898		June 13 1898		280.00		382.70		1.40		Robt J Boyd		National Surety Co, F. P. McCormick.	
Main Street		1400 East		1400 West		Sand		June 13 1898		June 13 1898		740.00		1926.70		1.93		F. P. McCormick		National Surety Co.	
Main Street		1400 East		1400 West		Sand		Dec 4 1898		Dec 4 1898		707.00		1785.80		1.90		Jas. O'Donnell		James Lillis, E. F. Swinney.	
Main Street		1400 East		1400 West		Sand		Apr 22 1898		Apr 22 1898		1200.00		3537.00		1.89		E. G. Trestrail		C. D. French, J. H. Owens.	
Main Street		1400 East		1400 West		Sand		July 17 1898		July 17 1898		249.00		473.70		1.59		C. M. Cravens		James Armstrong, J. J. Armstrong.	
Main Street		1400 East		1400 West		Sand		May 20 1898		May 20 1898		651.00		2774.90		1.52		F. P. McCormick		David McCormick, Gus D. Welch.	
Main Street		1400 East		1400 West		Sand		Nov 30 1898		Nov 30 1898		1088.00		16818.00		1.29		J. E. Parris		National Surety Co.	
Main Street		1400 East		1400 West		Comp		Oct 8 1898		Oct 8 1898		300.00		900.10		1.33		F. P. McCormick		Jas. Hamilton, Gus D. Welch, M. M. Holmes.	
Main Street		1400 East		1400 West		Sand		Nov 9 1898		Nov 9 1898		1408.00		3017.70		1.38		James O'Donnell		W. A. Kelley, A. G. Sutherland, James. Burns.	

Statement of Streets Paved with Brick at Close of Fiscal Year Ending April 18, 1898, at Noon—Continued.

Street	From	To	Specification		Maintenance		Linear Feet	Miles	Square Yards	Cost Per Square Yard	Contractor	Sureties
			Brick	Concrete	Accepted	Years						
Twelfth st	Main st	Troost ave	Sand	6	Aug 18, 1893	5 Oct 18, 1908	3,694.00	.70	9,480.50	1.36	James O'Donnell	W A Kelly, D S McConicle, L A Willard,
Thirteenth st	Washington st	Summit st	Sand	6	Nov 2, 1893	5 Nov 2, 1908	676.00	.12	1,644.10	1.78	C L Powell	P G Walker Jr, C Powell, G G Clarkson,
24th st	Tracy ave	Lydia ave	Sand	8 1/2	Oct 8, 1895	5 Oct 8, 1905	317.00	.05	1,061.00	.96	J E Paris	Gus K White, M M Holmes, Gus D Welch,
26th st	Southwest Blvd	Oak st	Sand	6	Apr 17, 1896	5 Apr 17, 1901	2,028.00	.39	7,956.00	1.43	J E Paris	Gus D Welch, E C Findlay, Jacob Welsh,
Twelfth st	West line	East line of Hickory st	Sand	OM	Dec 29, 1896	5 Dec 29, 1901	394.00	.06	810.00	1.40	R J Boyd P & C Co	Robt J Boyd, National Surety Co
24rd st	West line	East line of Hickory st	Sand	6	Nov 10, 1896	5 Nov 10, 1901	308.00	.05	1,298.40	1.56	Fred Feigel	Fidelity & Deposit Co of Maryland,
Twelfth st	West line	East line	Sand	OM	June 19, 1897	5 June 19, 1902	206.00		482.70	1.29	M Menze	Chas R Kollman, Wm E Zahner,
Twelfth st	Brooklyn	East line Penn-	Grout	6	July 15, 1897	15, 1902	653.10	.08	1,631.00	1.17	R J Boyd P & C Co	R J Boyd National Surety Co
Vine st	South st	Twelfth st	Grout	6	May 3, 1897	3, 1898	416.00	.08	1,413.30	1.55	P P McCormick	Gus D Welch, David McCormick
Virginia ave	Twelfth st	Fourth st	Grout	4	Aug 21, 1897	21, 1902	996.00	.11	2,967.40	1.57	R J Boyd P & C Co	Robt J Boyd, National Surety Co
Walnut st	Twelfth st	K C Bell Ry	Asp Cmt	6	Nov 3, 1897	3, 1907	582.00	.10	2,016.00	1.60	P P McCormick	F G Trestrail, T Brannan, C A Chamberlain,
Wal st	Wandotte st	Seventh st	Sand	6	May 25, 1897	25, 1906	508.00	.10	1,122.00	1.81	P G Trestrail	C J White, Wm Wassall, C D French,
Woodland ave	Twelfth st	Seventh st	Sand	6	May 25, 1897	25, 1906	1,421.00	.27	4,966.00	1.76	James O'Donnell	James Burns, W S Halliwell
Whittier Place	Oak st	Loose st	Sand	6	May 12, 1898	12, 1901	274.00	.04	916.30	1.40	Trestrail Pav'g Co	National Surety Co
Wyandotte st	Fourteenth st	Sixteenth st	Sand	6	Apr 21, 1903	21, 1908	913.00	.14	8,905.00	1.75	Geo J Beer	John Galligan, John B Ghio,
Washington st	Sixteenth st	Southwest Blvd	Sand	6	Nov 10, 1901	10, 1908	2,975.00	.50	12,295.00	1.71	P P McCormick	National Surety Co
Walnut st	Third st	Fourth st	Sand	Old	Apr 12,	12, 1899	190.00	.03	420.00	1.58	K C B & C Co	James Halpin, Jas O'Connor,
Walnut st	Second st	Third st	Grout	6	June 17,	17, 1901	418.00	.06	1,182.30	1.46	James Hamilton	D McCormick, F P McCormick, E F Swinney
Wabach ave	Fifteenth st	Eighteenth st	Mur Grt	6	Nov 17,	21, 1901	1,347.00	.26	4,624.80	1.74	Walter Williams	M Menze, Chas Kollman,
Wyoming st	Sixteenth st	Liberty st	Sand	OM	May 14,	14, 1902	2,264.80		9,201.50	1.74	Fred Feigel	A Talbot, The Fid & Dep Co of Maryland
Wyandotte st	Sixteenth st	Seventeenth st	Grout	6	Aug 12,	12, 1902	617.50		1,301.90	1.15	M Menze	Chas R Kollman, W E Zahner,
Wyandotte st	North line	Seventeenth st	Grout	6	Dec 20,	20, 1902	1,125.00		2,524.00		Parke Wash. Co	(Geo P Kirtley, H J O'Brien)
Woodland ave	Ninth st	Tenth st	Grout	6	Dec 20,	20, 1902	405.70		1,373.00		Fred Feigel	F P McCormick, J M Sellers, D McCormick,
Total Amounts									28,441	482,398.41		A Talbot, The Fid & Dep Co of Maryland,

Statement of Streets Paved With Stone Blocks at Close of Fiscal Year Ending April 18, 1898.

Street	From	To	Founda- tion.		Accepted.	Maintenance.		In. Ft.	Miles	Square Yards	Cost per Square Yd.	Remarks.	Contractor.	Sureties.
			Con- crete	Sand		Exp.	Expires.							
15th	Bluff st	bridge	0	0	1896			755		4577.00	\$2.50	Repaired and repaired.	George Todd	
16th	Delaware.	Grand ave.	0	14	Jan. 7, 1900			578		2426.40	3.05		Kepley & Arnett.	
17th	Santa Fe	W. end of 11th	0	0	Jan. 20, 1901	5 Jan.	29, 1906	1113		3976.10	2.90		W. J. McGonigal	James McGonigal Ed L. Scarritt.
18th	Broadway.	Bluff.	0	0	Jan. 8, 1901			775		4250.00	3.50		B. F. Camp	
19th	Third	Front	0	0	Aug. 1, 1901			924		1583.87	3.85		F. Saxton	
20th	Union ave	Thirteenth	0	0	Sept. 9, 1901			976		8555.10	3.80 1/2		Comstock & Halsey.	
21st	Fourth	S. li Fifth	0	0	June 25, 1901	5 June	25, 1906	215		645.50	2.50		C. L. Powell	P. G. Trestail, C. D. French, J. H. Owens.
22nd	Main	Grand ave.	0	0	Mar. 20, 1901			571		979.10	5.20		J. D. Hackett.	
23rd	Union ave	Twelfth	0	11	June 4, 1900			600		2953.00	3.44		Geo. J. Baer	
24th	Main	Walnut	0	24	Dec. 14, 1905	5 Dec	14, 1900	265		982.70	2.77		H. S. Trestail.	C. D. French, F. G. Trestail, J. S. French.
25th	Main	Walnut	0	24	Oct. 15, 1905	5 Oct.	15, 1900	270		900.80	2.77		H. S. Trestail.	C. D. French, F. G. Trestail, J. S. French.
26th	Liberty	Hell	0	11	Dec. 16, 1905	5 Dec.	16, 1905	1167		2700.00	2.90		Mulvane & Kepley.	W. H. Winants, Witten McDonald.
27th	Main	Grand ave	0	1	Jan. 31, 1906	5 Jan.	31, 1901	494		1240.00	2.80		James McGonigal.	A. Frame, J. O'Connor, J. McGonigal.
28th	Easterly li St													
29th	Louis ave ext	Hickory	0	2	Mar. 27, 1904.			2250.		9037.50	.93	Reconstructed.	F. G. Trestail	
30th	Second	Fourth	0	2	Jan. 6, 1902.			550		2449.20	2.579		C. L. Powell.	
31st	N li Fourth	N li Fifth	0	24	May 12, 1904.	5 May	12, 1909.	203		1559.00	2.47		James O'Donnel	J. G. Glennon, J. S. Lillis.
Total paved to date, 212 miles										11880	17458.17			

Statement of Streets Paved with Macadam, Etc., at Close of Fiscal Year Ending April 18, 1898.

Material Used—Inches										Maintenance		Remarks	Contractor	Sureties
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J. Van Buren
J. C. National
Surety Co.
W. H. Dixon
A. McIntyre.
Natl. Ky. Co

Statement of Streets Paved with Macadam, Etc., at Close of Fiscal Year Ending April 18, 1898.—Continued.

[illegible]

Statement of Streets Paved with Macadam, Etc., at Close of Fiscal Year Ending April 18, 1898.—Continued.

Street	From	To	Material Used—Inches.						Maine 'nos		Linear Feet	Miles	Square Yards.	Cost per Square Yard.	Remarks.	Contractor.	Sureties.
			Crushed Granite	Screening	Gravel	Limestone	Crushed Limestone	Broken Limestone	Belth. Falls	Gravel	Years	Expires					
18th	Grand ave	Oak.				6	6			38, 1892			.00	88		T. Brosnahan	{ D. McCormick. C. Powell M. M. Holmes
17th	Madison	Holly				6	6			12, 1891.	5	Oct. 15	.00	1 00 1/2		C. L. Powell	
16th	Locust	Holmes				6	6			20, 1892			.80	87		T. Brosnahan	
Summit	Twelfth	Thirteenth								8, 1893			.00	88 1/2		W. Powell	{ J. McGonigal F. O'Rourke.
Shawnee	Genesee	State Line								6, 1893			.00	86		Flak Mahoney	
S. W. Bvd	Main	Broadway								10, 1895	2	Apr 16	.80	1 04 1/2		J. O'Connor.	
S. W. Bvd	Eline	E. R. St. Bl.								11, 1896			.20	64	Brk. Gut's	K. C. Mc'm Co	{ J. S. Chick, J. W. Hoover, E. R. Weeks, R. B. Forterfield
S. W. Bvd	Broadway	I. Gates ad.								25, 1896			.20	80	Brk. Gut's	J. Mahoney.	
Sixth	Bel Ry B'g	State Line								14, 1896			.40	85 1/2		Crowley & Gray	
81st	Park av	Prospect A								17, 1896			.60	85		W. H. Crowley	
82d	Main	Holmes								2, 1893			.00	42 1/2		J. W. Drinkwater	
21st	Grand ave	Balt ave								8, 1896			.90	70		J. McGovern	
22d	W. W. Bvd	W. Pros Pl								24, 1896			.60	81 1/2		R. O'Connor.	
23d	Wyandotte	Broadway								20, 1896			.70	1 00	Brk. Gut's	On Riv Gra Co.	
24th	Troost ave	Forest av								8, 1898			.30	82		K. C. Mc'm Co	
Vine	S. W. Bvd	Fairm't av								5, 1898			.80	85		Elak Mahoney	
Virginia av	15th	25d								Oct 24, 1898			.00	83		W. H. Crowley	
Wyoming	17th	Fifteenth								Mar 6, 1898			.00	82 1/2-10		Prop. Owners.	
W. Bvd	Ninth	Liberty								July 18, 1898			.80	87		K. C. Bg & C. Co.	
Wabash av.	Twelfth	Fifteenth								Dec. 29, 1896	2	Dec. 29	.60	98 4-10		K. C. Bg. Gra. Co	
Total amounts.													100015	20.76	421244.87		

Statement of Streets Paved with Macadam in Annexed Territory at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street	From	To	Specification						Maintenance		Square Yards	Cost Per Square Yard.	Contractor.
			Crushed Granite Inches	Granite Screening Inches	River Gravel Inches	Limestone Screening Inches	Crushed Limestone Inches	Broken Limestone Inches	Heavy Stone-Inches	Bank (Gravel) Inches	Accepted	Years	
1st st	35th st	36th st				1		11	} Stone Cross'g / } Brick Gutter			2	6,820.00 77 F. P. McCormick.
2nd st	35th st	36th st				1		11	} Stone Cross'g / } Brick Gutter			2	6,481.10 77 F. P. McCormick.
3rd st	Main st	Cherry st. East City Limits				1		11	} Stone Cross'g / } Brick Gutter			2	1,884.00 77 F. P. McCormick.
4th st	Main st	Cherry st. East City Limits				1		11	} Stone Cross'g / } Brick Gutter			2	1,885.00 77 F. P. McCormick.
5th st	Wyandotte st	McGee st				1		11	} Stone Cross'g / } Brick Gutter			2	1,659.00 77 F. P. McCormick.
6th st	Broadway	Oak st				1		11	} Stone Cross'g / } Brick Gutter			2	2,151.00 77 F. P. McCormick.
7th st	35th st	36th st				1		6					1,739.00 A. J. Armstrong.
8th st	35th st	36th st				1		6					6,022.00 A. J. Armstrong.
9th st	35th st	36th st				1		6					2,702.00 A. J. Armstrong.
10th st	35th st	36th st				1		6					2,150.00 A. J. Armstrong.
11th st	35th st	36th st				1		6					3,452.00 A. J. Armstrong.
12th st	35th st	36th st				1		6					1,554.00 A. J. Armstrong.
13th st	35th st	36th st				1		6					6,025.00 A. J. Armstrong.
14th st	35th st	36th st				1		6					2,436.00 A. J. Armstrong.
15th st	35th st	36th st				1		15					1,716.00 A. J. Armstrong.
16th st	35th st	36th st				1		15	} Stone Cross'g / } Brick Gutters			2	4,551.00 A. J. Armstrong.
17th st	35th st	36th st				1		15					1,246.00 F. P. McCormick.
18th st	35th st	36th st				1		6					10,800.00 A. J. Armstrong.
19th st	35th st	36th st				1		6					7,010.00 A. J. Armstrong.
20th st	35th st	36th st				1		7					6,816.00 F. P. McCormick.
21st st	35th st	36th st				1		6					7,236.00 A. J. Armstrong.
22nd st	35th st	36th st				1		6					17,476.00 A. J. Armstrong.
23rd st	35th st	36th st				1		6					5,831.00 County.
24th st	35th st	36th st				1		6					55,706.00 County.
25th st	35th st	36th st				1		6					4,046.00 County.
26th st	35th st	36th st				1		6					4,069.00 County.
27th st	35th st	36th st				1		6					1,254.00 County.
28th st	35th st	36th st				1		6					3,200.00 County.
29th st	35th st	36th st				1		6					5,922.00 County.

Statement of Streets Paved with Macadam in Annexed Territory at Close of Fiscal Year Ending April 18, 1898, at Noon—Continued.

Street.	From	To	Specification.								Maintenance.		Linear Feet.	Square Yards.	Cost per Square Yard.	Contractor.
			Crushed Granite. Inches.	Crushed Granite Screenings. Inches.	River Gravel. Inches.	Limestone Screenings. Inches.	Crushed Limestone. Inches.	Broken Limestone. Inches.	Bethany Falls Lime-stone—In.	Bank Gravel. Inches.	Accepted.	Years.	Expires.			
30th st	Broadway	State st												18,882.00	66	A. J. Armstrong.
10th (Church) st	Washington st	Penn st					"							1,880.00		
Westport ave	Main st	33rd st					6							15,408.00	52	A. J. Armstrong.
33rd st	Westport ave	State st					6							10,640.00	69	A. J. Armstrong.
10th st	Warwick Rd	Oak st					6-15							2,876.00	54-68	
11st st	Main st	Oak st		1										6,056.00		A. J. Armstrong.
23rd st	Clay st	Oak st		1			15							6,876.00	65	A. J. Armstrong.
Myrtle st	Central st	Washington st												1,880.00		A. J. Armstrong.
	S. City Limits															
Wornall Road	Westport	South ½ mile					6							2,640.00		County.
Woodland ave	31st st	South 2 miles					6							21,120.00		County.
Linwood ave	Troost ave	Woodland ave					6							11,734.00		County.
Fairview ave	Independ'ave	St. John ave					6							11,734.00		County.
Independ'ave	Cleveland ave	E. City Limits					6							52,840.00		County.
Gimwood ave	Independ'ave	Twelfth st					6							11,734.00		County.
Fifteenth st	E. City Limits	Cleveland ave					6							52,840.00		County.
Twelfth st	Cleveland ave	Jackson ave					6							10,560.00		County.
Jackson ave	Fifteenth st	S. City Limits					6							28,512.00		County.
Indiana ave	31st st	S. City Limits					6							11,734.00		County.
31st st	Prospect ave	Indiana ave					6							11,734.00		County.
Total amounts													80 87-100 miles.	160,870.00	588,794.40	

Statement of Streets Paved with Cedar Blocks at Close of Fiscal Year Ending April 18, 1898, at Noon.

Street	From	To	Foundation Specifications			Accepted.	Maintenance.		Linal Feet.	Mils.	Total Price.	Contractor.	Sureties
			Gravel	Board	Concrete		Yds.	Expes.					
Aldine Place	Washington st	East end	2	1		Oct. 6, 1896			235.00	.04	778.00	1 13 Jaicks & Robinson	
Altmore ave	Southwest Blvd	Milwaukee ave	8	1		July 25, 1897			1,321.00		3,842.70	1 26 Andrew Jaicks.	
Allefonte ave	Thompson ave	Independence av	3	1		Oct. 25, 1896			500.00	.11	1,943.00	1 47 Geo. J. Raer.	
Allefonte ave	Thompson ave	Lexington ave	1		6	May 3, 1896			1,007.00	.19	3,429.50	1 479 J. B. Smith & Co.	
Allefonte ave	Ninth st	Twelfth st	1		6	May 3, 1896			1,254.00	.24	4,500.00	1 42 Jaicks & Robinson	
Boardway	Fourteenth st	South line of 16th st	1		9	Nov. 24, 1894			1,278.00		9,920.00	2 481 Comstock & Halsey	
Boardway	21st st	23rd st	1		9	Nov. 24, 1894							
Brooklyn ave	Independence av	Ninth st	2		6	Dec. 24, 1891			1,323.00	.26	4,672.00	1 48 Lillis & Glennon.	
Central st	Fifth st	Sixth st	2	1		Aug. 17, 1896			470.00		1,117.00	1 87 Geo. J. Raer.	
Central ave	Eighteenth st	21st st	3	1		Nov. 14, 1896			1,184.00	.21	4,531.00	1 82 Geo. J. Raer.	
Empire st	Independence av	Eight st	3	1		Apr. 13, 1896			1,105.00	.21	2,009.00	1 119 J. B. Smith & Co.	
Fourth st	Central st	Broadway	1		6	Oct. 30, 1898			674.00		1,858.00	2 07 A. J. McBean	
Fourth st	Broadway	Central st	3	1		Dec. 12, 1894			334.00	.06	1,116.00	1 38 Andrew Jaicks.	
Fourth st	Madison ave	Bellevue ave	3	1		June 30, 1894			327.00	.06	904.84	1 50 B. A. Taylor.	
Fourth st	Grand ave	Lydia ave	3	1		Dec. 8, 1893			4,350.00	.80	9,377.00	1 20 Jas. McGonigle.	
Fourth st	Fifteenth st	Nineteenth st	1		6	July 13, 1896			1,828.00	.34	7,440.50	1 00 J. C. & D. S. McBean.	
Fourth st	Nineteenth st	22d st	1		6	May 6, 1896			1,303.00	.25	6,357.50	1 459 J. B. Smith & Co.	
Fourth st	Fifth st	Ninth st	1		6	Nov. 6, 1897			314.00		2,420.00	2 52 Geo. J. Raer.	
Fourth st	Fifteenth st	31st st	3	1		Nov. 18, 1896			8,000.00	1.70	26,303.50	1 33 Ben A. Taylor.	
Fourth st	Ninth st	Tenth st	3	2		Oct. 16, 1896			435.00	.08	1,749.00	1 39 Jaicks & Robinson	
Fourth st	Eighteenth st	24th st	3	2		Sept. 23, 1896			645.00	.12	2,416.00	1 58 B. A. Taylor.	
Fourth st	Fifth st	Commerce ave	3	1		Sept. 17, 1896			1,736.00	.32	6,358.08	1 37 A. J. McBean & Co.	
Fourth st	Fourth st	Independence av	3	1		Oct. 2, 1896			1,024.00	.17	4,218.06	1 37 J. B. Smith & Co.	
Fourth st	See 1st st	Third st	1		9	May 16, 1894			800.00		1,200.00	2 00 Jas. McGonigle.	
Fourth st	Belaware st	Walnut st	1		4	Aug. 6, 1895	3	Aug 5, 1896	601.00	11	1,762.00	1 12 Geo. J. Raer.	G. Ellison, J. B. Ohio, J. Feall.
Fourth st	Fourteenth st	Sixteenth st	3	1		Nov. 20, 1896			532.00	.10	1,016.00	1 89 J. B. Smith & Co.	
Fourth st	Sixteenth st	Seventeenth st	3	1		June 4, 1896			453.00	.16	1,611.20	1 39 Kenyon & Knight	

Statement of Streets Paved with Cedar Blocks at Close of Fiscal Year Ending April 18, 1898,
At Noon.—Continued.

Street	From	To	Foundat'n. Spec.			Accepted.	Lineal Feet.	Miles.	Square Yards.	Cost Per Square Yard	Contractor.
			Sand Inches	Boards Inches	Concrete Inches						
Woodland Ct	Woodland av	E. c. Wild. Ct.	3	1		May 3, 1888	343.00	.05	778.00	1 214	Jaicks and Robinson.
Wabash ave	Pine st	Dora ave	3	1		Nov. 1, 1888	300.00		1000.00	1 28	J. B. Smith & Co.
Windsor ave	Waltrond ave	Bales ave	1		6	Dec. 2, 1888	713.00	.13	2316.00	1 41	D. J. and J. G. McBean.
Waltrond ave	St. John ave.	Norledge Pl.	3	1		Sept. 24, 1888	800.00		2880.00	1 46	A. J. McBean & Co.
							73044.00		249404.75		
Total cedar block pavement laid							279,452 lineal feet.	53.02 miles.	1,072,500.05 square yards.		
taken up							20,008		822,005.80		
Apr. 18, 1888							73,044		13.78 miles.	249,804.75	

NINTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF STREETS,

For the Fiscal Year Ending April 18th, 1898.

To the Honorable Board of Public Works, Kansas City, Mo.

GENTLEMEN:—I herewith submit to you a report of the operation of the Street Department during the fiscal year ending April, 1898, showing by tabular statements the manner in which the amount allotted to this department by your honorable body was expended.

I shall endeavor to demonstrate to you and the taxpayers of Kansas City, by this report, that the Street Department has greatly reduced the expenditures during the past year, as compared with former years. The appropriation for this department was \$77,875.00, which is

\$16,100.00 less than in 1888,
17,500.00 less than in 1890,
9,700.00 less than in 1891,
7,000.00 less than in 1892,
7,700.00 less than in 1894,
3,700.00 less than in 1895;

While I have had

75 Miles more to clean than in 1889,
65 Miles more to clean than in 1890,
51 Miles more to clean than in 1891,
55 Miles more to clean than in 1892,
49 Miles more to clean than in 1893,
36 Miles more to clean than in 1894,
27 Miles more to clean than in 1895,
21 Miles more to clean than in 1896.

At the same time, I have maintained in fairly good condition the streets and alleys of Kansas City.

Kansas City has over 120 miles of paved streets and alleys, and to keep them in a healthy and clean condition requires a great deal of hard and continuous labor, and more so on account of so many intersecting streets yet being unpaved, thereby causing mud in wet and rainy weather to be carried up by wagons and teams from the dirt streets onto the paved streets, and it is impossible to accomplish all that is desired in the work of the Street Department. The constant tearing up of the street pavements for water, gas and sewer connections, and improper relaying of same, renders it impossible to keep them in good condition.

The permit ordinances regulating this matter are very unsatisfactory, and I earnestly recommend that the ordinance be revised and that the city take direct charge of refilling all excavations in the streets, performing the work by a force of experienced men; the work to be paid for by the city out of money deposited by the party to whom the permit shall be issued. In this way only can proper work be assured.

A year's trial has demonstrated beyond doubt, the practical assistance in keeping our streets clean, of the receptacles placed by the department in the various parts of the city to receive scraps of paper, banana peelings, etc., which were formerly thrown onto the sidewalks or into the streets, thereby endangering the life and limb of pedestrians.

That the request to use these receptacles has been quite generally complied with is shown by the number of times it has become necessary to empty them.

A more general co-operation on the part of the public with us in this plan is earnestly desired, and additional receptacles will be provided when necessary.

I would also urge the discontinuance of the sweeping of dirt from the stores on the sidewalks and into the gutters.

I would most respectfully recommend that distributing of hand-bills be in some way regulated and placed under proper restrictions. This practice has become a positive nuisance and it frequently happens that they are distributed on Saturday

afternoon after our cleaning gangs have been over the streets and left them in good condition.

It is very discouraging on Sunday morning, when the uncleanliness of the streets is so much more noticeable, to find the streets and gutters full of dirty paper.

I trust that some steps may be taken to remedy this evil.

Acknowledging my many obligations to your honorable board for the many courtesies and valuable assistance in the discharge of the duties of my department, in conclusion, I would respectfully suggest that the board be given an increased appropriation for the ensuing year that we may be better able to cope with the work devolving upon this department.

To all of them associated with me in this department, including all employees, I desire to extend my personal thanks for kind treatment and earnest assistance; especially to the workingmen who labored upon the streets, is due some credit for their successful showing for the year.

WALTER M. DAVIS,
Superintendent Streets.

SUMMARY.

	PAY ROLL AND ACCOUNTS.	TOTALS.	TOTALS.
1897.	April 19 to 30, Pay Roll	\$2,622.86	
1897.	April 19 to 30, Bills Paid	128.81	\$2,749.67
1897.	May, Pay Roll	6,764.44	
1897.	May, Bills Paid	802.10	7,566.54
1897.	June, Pay Roll	5,847.38	
1897.	June, Bills Paid	1,625.00	7,478.38
1897.	July, Pay Roll	5,720.53	
1897.	July, Bills Paid	1,227.28	6,947.81
1897.	August, Pay Roll	5,771.69	
1897.	August, Bills Paid	576.21	6,347.90
1897.	September, Pay Roll	6,036.78	
1897.	September, Bills Paid	981.04	7,017.82
1897.	October, Pay Roll	5,734.36	
1897.	October, Bills Paid	299.64	6,034.00
1897.	November, Pay Roll	5,523.83	
1897.	November, Bills Paid	772.17	6,313.50
1897.	December, Pay Roll	5,339.32	
1897.	December Bills Paid	810.36	6,149.68
1898.	January, Pay Roll	5,910.41	
1898.	January, Bills Paid	393.71	6,304.12
1898.	February, Pay Roll	5,532.04	
1898.	February, Bills Paid	982.21	6,514.25
1898.	March, Pay Roll	5,998.02	
1898.	March, Bills Paid	463.70	6,461.22
1898.	April 1 to 18, Pay Roll	2,114.09	
1898.	April 1 to 18, Bills Paid	68.50	2,182.59
Total			\$78,061.48

DISTRIBUTION OF MONTHLY PAY ROLLS FROM APRIL 20, 1897, TO APRIL 18, 1898.

	Months.	Superintendent.		Clerks.	Inspection.	Foreman.	Carpenters.	Masons.	Painters.	Teams.	Laborers.	Totals.
1897	April 20 to 30	\$ 60 22	\$ 82 50	\$ 55 00	\$ 82 50	\$ 79 03	\$ 22 50	\$ 36 00	\$ 19 25	\$ 884 26	\$1,884 10	\$ 2,022 86
1897	May	166 66	225 00	150 00	225 00	277 67	67 50	112 00	22 00	1,974 04	8,769 57	6,764 44
1897	June	166 66	225 00	150 00	225 00	300 14	60 38	100 00		1,614 59	8,280 66	5,847 88
1897	July	166 66	225 00	150 00	225 00	306 55	61 06	100 00		1,486 29	8,271 97	5,720 53
1897	August	166 66	225 00	150 00	225 00	310 78	62 50	102 00		1,574 94	8,179 81	5,771 69
1897	September	166 66	225 00	150 00	225 00	326 24	65 00	112 00		1,628 29	8,868 59	6,036 78
1897	October	166 66	225 00	150 00	225 00	324 83	61 25	180 80		1,738 00	8,586 21	6,877 75
1897	November	166 66	225 00	150 00	225 00	311 62	59 00	259 20		1,822 00	4,977 56	7,971 08
1897	December	166 66	225 00	150 00	225 00	267 65	63 63	250 60		1,446 72	2,770 06	5,839 82
1898	January	166 66	225 00	150 00	225 00	301 46	112 50	100 00		1,701 12	8,152 97	5,910 41
1898	February	166 66	187 50	152 50	187 50	292 48	117 50	144 00		1,521 07	2,950 88	5,582 04
1898	March	166 66	150 00	150 00	150 00	365 59	108 00	99 25		1,949 19	8,009 73	5,968 42
1898	April 1 to 18	100 00	90 00	90 00	90 00	120 08	27 50	36 00		652 95	997 56	2,114 09
	Totals..	\$1,948 48	\$2,535 00	\$1,797 50	\$2,535 00	\$3,581 12	\$491 27	\$1,681 85	\$41 25	\$19,988 16	\$39,594 11	\$72,006 74

MISCELLANEOUS EXPENSE.

	Months.	Salaries of Supt. and Clerks.		Salaries of Inspectors.	Main-tenance of Horses.	New Tools.	Repairing Tools.	Sundries.	Totals.
1897	April 20 to 30	\$115 22	\$ 82 50	\$21 00	\$ 80 00	\$ 0 55	\$ 2 86	\$308 18	
1897	May	316 66	225 00	60 00	59 48	76 85	173 94	911 98	
1897	June	316 66	225 00	60 00	148 40	58 45	111 06	919 57	
1897	July	316 66	225 00	60 00		40 25	31 54	673 45	
1897	August	316 66	225 00	60 00	61 00	40 26	92 68	796 60	
1897	September	316 66	225 00	60 00	164 00	26 49	282 41	1,024 56	
1897	October	316 66	225 00	60 00	19 00	55 07	39 98	715 71	
1897	November	316 66	225 00	60 00	122 00	98 95	105 58	928 19	
1897	December	310 66	225 00	60 00	98 75	49 45	57 29	802 15	
1898	January	316 66	225 00	60 00	80 00	58 10	124 30	864 06	
1898	February	319 10	187 50	56 70	40 00	17 85	89 48	660 63	
1898	March	316 66	150 00	45 00	80 00	8 05	280 53	825 24	
1898	April 1 to 18	190 00	90 00	9 00				289 00	
	Totals	\$8,790 92	\$2,535 00	\$671 70	\$947 68	\$526 82	\$1241 65	\$9,713 22	

Work Distributed on Streets.—Continued.

Streets.	Cleaning.		Paved Streets.		Dirt and Macadam		Sewer Maintenance		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Totals.
	No. loads removed.	Cost.	Paved Streets.		Dirt and Macadam		Sewer Maintenance		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		
			Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
Totals forwarded	79 03	8027 22	19 20	176 34	282 05	944 97	380 71	876 09	823 93	268 12	153 66	221 98	52 71	177 26	725 01	2876 51	15001 79
Dora									5 72	3 34							9 06
Dunham	36	53 78															53 78
Dripp	1483	1805 31	12 75	20 75	57 45	119 68	151 60	302 17	16 47	32 25	67	1 90	156 95	45 91			2813 86
Eighteenth	409	701 40			9 60	23 66	45 31	77 18	16 65	12 06	3 85	8 71					806 44
Fifth	460	803 54			2 70	12 50	36 77	112 87	10 35	9 46							988 19
Fifteenth	4	4 35						1 64	1 90	3 58							11 47
Euclid							90	3 82	25 35	20 86	18 67	13 51	3 87	4 40	34 50	26 48	50 96
Fairmount					27 00	111 50			25 35	20 86							816 14
Fifth	367	482 96		4 75	23 40	17 56	21 20	70 11	11 88	13 26							605 12
Fifteenth	410	675 15				3 12	15 22	45 65	48 33	25 75					47	8 78	817 47
First	56	46 25					8 95	19 91	20 41	28 15							75 11
Flora	77	121 96				4 75											184 27
Forest	203	301 00				9 45	12 36		11 09	11 27	45	3 26					323 81
Fourteenth	303	760 97				22 50	53 49	126 80								5 08	904 86
Fourth	119	139 86		7 13			11 15	31 55	0 68	3 96			615 91	168 85	2 74	3 78	900 91
Franklin													2 89	7 66			10 05
Freight																	
Garfield	73	156 25						2 46	2 80	4 22							165 73
Garnier	9	11 79															11 79
Genesee	163	193 17					3 45	10 21	12 15	6 33							225 31
Gillis					14 40	28 50		6 56									49 46
Gladstone								2 46									2 46
Grand	2971	3457 95					19 00	53 06	3 18	1 68			87	4 66	2 82	8 28	3551 50
Grandy								1 46									1 46
Grove								2 46	6 52	4 66							13 04
Guinotte							1 65	76							82	3 78	7 01
Garland																	
Harrison	71	118 21				1 50	9 15	8 65	64	3 34							136 49
Hickory	195	266 57						37 46									304 03
Highland	22	27 68						2 00	8 59	9 90							48 16
Holly	36	85 94					5 78		17 53	16 07							75 33
Holmes	179	259 70			156 60	218 50		7 38	20 00	12 51							674 69
Totals forwarded..	14789	18580 51	81 95	203 97	573 28	1598 19	776 69	1797 71	604 51	511 45	177 30	244 36	832 70	408 69	766 86	2427 64	20496 31

Work Distributed on Streets.—Continued.

Streets	Cleaning.		Paved Streets.		Dirt and Macadam Sewer Maintenance		Crownwalks		Sidewalks.		Bridges.		Miscellaneous.		Totals	
	No. loads removed.	Cost.	Material	Labor	Material	Labor	Material	Labor	Material	Labor	Material	Labor	Material	Labor		
Totals forwarded.	147 49	185 51	31 96	204 97	573 28	1508 19	776 09	1797 71	604 51	511 45	177 30	244 26	833 70	408 09	2427 64	20496 31
Independence ave	478	751 92				9 50	16 20	11 28	12 13	9 02	6 67	7 56			1 57	26 31
Independence ave	13	15 94					37 88	41 97	80 80	43 40	9 84	4 87				27 83
Independence ave	65	100 11					12 00	87 58	23 94	18 14			5 57	10 34		876 06
Independence ave	1	1 16						6 74					7 44	21 08		167 02
Independence ave									12 06	7 57						179 19
Independence ave									38 28	34 18						28 47
Independence ave									10 74	10 15						20 28
Independence ave									18 71	14 49						81 23
Independence ave									6 79	12 50						9 01
Independence ave									8 92	10 78						88 70
Independence ave									16 28	16 15						178 16
Independence ave									7 75	10 04						27 79
Independence ave									7 26	6 83						312 57
Independence ave									27 56	17 06						244 87
Independence ave									10 73	6 92						2 08
Independence ave																28 90
Independence ave																20 48
Independence ave																14 48
Independence ave																207 88
Independence ave																97 82
Independence ave																116 87
Independence ave																19 73
Independence ave																87 24
Independence ave																1 98
Independence ave																2087 76
Independence ave																798 14
Independence ave																228 88
Independence ave																42 10
Independence ave																5570 68
Independence ave																907 48
Independence ave																2118 26
Independence ave																279 21
Totals forwarded.	147 49	208 17	26 40	216 38	771 08	2500 50	1135 53	2716 10	911 53	1855 31	199 78	256 21	854 50	470 79	2742 60	44385 89

Work Distributed on Streets.—Continued.

Streets.	Cleaning.		Paved Streets.		Dirt and Macadam		Sewer Maintenance		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Total.
	No. loads removed.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.			
Totals forwarded	191 96	28820 19	35 80	216 33	771 08	2594 50	1135 53	2716 10	911 53	1455 21	199 78	296 21	454 50	470 79	803 08	2742 69	44435 89
Nicholson																	
Nineteenth	545	604 37			20 70	46 40	132 87	409 14	11 77	11 60							1330 89
Ninth	1277	1643 59			114 30	113 69	57 52	179 93	67	2 91	22 85	33 08					2168 54
Oak	126	226 91					2 35	10 79	6 75	6 92							253 72
Olive	265	305 26					35 33	51 96	5 32	15 63			2 48	18 67			423 75
Ord							4 01	10 96									14 97
Pacific									6 60	3 91							10 51
Park	77	124 58	5 15	15 25			10 93	81 72	16 14	15 48							219 25
Peery	8	10 19			75		82										11 76
Pendleton						4 75		3 28	8 38	11 71							28 12
Penn	85	127 53				3 34	6 30	5 60	14 75	13 22			19 48	53 94			244 16
Pine																	
Prospect	99	153 84				20 00	4 13	20 65	42 42	25 63			7	2 91			299 65
Reservoir									6 53	8 07							14 60
Roberts									13 67	10 92							24 59
Rochester									12 36	9 46							21 82
S. W. Boulevard	437	280 73			94 80	190 77	15 85	30 22	7 92	5 63							625 97
Salisbury																	
Santa Fe	48	59 36										4 75					59 36
Scarritt							10 55	51 92									18 66
Second							7 65	52 67									62 47
Sixth	628	678 24			290 85	561 07			12 46	10 05	2 20	20 58			80 45		1586 16
Seventh	812	428 26			73 80	94 57	8 60	29 47									634 70
Sixteenth	172	280 01			28 80	80 03	94 36	287 40	14 52	9 35							798 29
Seventeenth	161	201 22			3 60	26 28	67 53	130 63	11 95	11 96	11 18	11 71	53	1 90			478 49
Smart																	
State Line																	
Summit	15	24 76			2 93	3 78	3 15	12 85	10 77	9 04			3 00	11 70			81 93
St. John	69	83 76				8 00		12 95	67	3 84							108 72
St. Louis	526	799 09		3 89			6 70	15 15					1 21	3 53	1 18	18 38	329 02
Third	300	297 76		1 79			2 94	25 81	28 35	27 37							402 50
Fifth	227	333 82			3 30	11 18	20 83	76 91	15 31	8 60							484 62
Twelfth	871	1568 49			44 40	141 29	21 95	141 60	6 48	6 24			12 53	22 98			2059 12
Totals forwarded	254 84	37050 64	40 95	236 66	1419 81	3899 63	1649 40	4331 16	1165 82	2032 45	260 45	445 51	803 82	530 47	804 26	2847 89	57707 50

Work Distributed on Streets.—Continued.

Streets.	Cleaning.		Paved Streets.		Dirt and Macadam Sewer Maintenance		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Totals.
	No. loads removed.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
Totals forwarded.	254 34	87000 64	40 95	220 06	1419 31	3800 03	1049 40	4331 16	1165 32	2402 45	240 45	445 51	804 26	2847 89	57707 50
Thirteenth	294	601 34	1 20	1 75		4 72	91 61	148 37	6 34	10 41	6 64	13 76		1 79	888 95
Twentieth	214	243 24			2 40	3 30	89 15	158 36	33 11	24 85	1 35	9 32		68 72	670 51
Twenty-first	54	66 60			2 70	99 03	67 70	121 70	14 72	15 44	1 27	1 57	4 76	6 27	422 15
Twenty-second	2	2 92				50 44	13 85	24 72	23 17	20 06	18 64	15 14		216 12	898 78
Twenty-third	10	13 11			18 00	105 79	7 40	22 50	32 16	26 70	30 64	30 16		4 16	811 60
Twenty-fourth	214	167 53			87 83	277 62	20 93	117 82	66 33	60 24	4 71	5 25		24 00	817 23
Twenty-fifth					47 78	159 00	12 30	45 62	53 64	48 46	1 70	1 90	67	8 00	592 90
Twenty-sixth					12 45	49 63		6 02	31 13	34 65	6 80	5 78		42 77	212 83
Twenty-seventh	30	49 54				15 18		4 02	31 75	17 73	3 10	1 90		7 05	94 85
Twenty-eighth	14	20 38				9 96	2 50	10 22	1 77	5 15					32 49
Twenty-ninth	26	26 97			62 40	46 13	24 31	42 18	26 09	41 38					341 43
Thirtieth	30	27 56			12 60	22 14	8 64	18 34	35 29	26 29			14 65	82 13	206 20
Thirty-first						24 03	9 83	22 17	34 10	36 91					129 64
Thirty-second	13	14 14													14 48
Thirty-third	30	17 37													17 37
Thirty-fourth	4	2 49													37 23
Thirty-fifth	11	14 14													15 05
Cerrace															
Thompson															
Tracy	75	133 06													
Trout	340	543 95													
Union avenue	646	661 34													
Ripe st	2	2 92													
Virginia	10	21 75													
Walsh	113	172 13													
Wall	41	123 20													
Walnut	2177	2409 74													
Walmond	11	102 54													
Washington	62	79 30													
Washington prospect															
West	241	243 25													
West	274	119 41													
West	277	277 15													
West	279	277 15													
West	279	277 15													
Totals forwarded.	207 02	43615 24	42 15	208 17	1007 27	4049 74	2047 50	5279 06	1700 36	2553 78	346 77	542 16	831 46	2006 70	60471 90

Work Distributed on Streets.—Continued.

Streets.	Cleaning.		Paved Streets.		Dirt and Macadam.		Sewer Maintenance.		Crosswalks.		Sidewalks.		Bridges.		Miscellaneous.		Total.
	No. loads removed.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
Totals forwarded.....	307 02	48845 24	42 15	288 17	1667 27	4900 78	2047 80	5279 96	1709 88	2558 78	846 77	542 16	1584 85	1088 79	881 46	2986 70	60471 90
Westport.....	36	58 41					8 05	17 51									78 97
Whittier Pl.....	1	1 46						2 46									3 92
Washing streets.....																	
Greel.....	12	16 91															16 91
Dirty-sixth st.....	2	1 46							5 91	5 08							13 05
Warwick.....	97	67 96															67 96
Drich.....																	2 00
Coy.....								2 00	6 52	3 78							10 80
One st.....									4 41	3 78							8 19
Dirty-eighth.....									6 86	5 08							12 04
Totals forwarded.....	307 50	48786 98	42 15	288 17	1667 27	4900 78	2058 94	5302 11	1782 91	2572 70	846 77	542 16	1594 86	1088 79	881 46	2986 70	60036 24

WORK DISTRIBUTED ON ALLEYS.

	Months.	Cleaning.		Paved Alleys.		Unpaved Alleys.		Sewer Maint'e.		Crosswalks.		Miscellaneous.		Total.
		No. Loads Removed.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
1907	April 24th to 30th	137	\$ 80 12			60	\$14 25	\$ 9 30	\$ 33 44					\$ 137 80
1907	May	84	122 22					82 51	191 92				\$ 38	\$ 897 03
1907	June	41	86 71					13 83	16 06			\$ 2 60	7 21	120 31
1907	July	38	104 64				5 69	10 40	19 68					151 65
1907	August	44	93 18	\$ 2 70	\$ 8 54		4 75	4 45	2 03					173 84
1907	September	53	133 81	9 30	60 13		9 50	5 95	15 45					164 71
1907	October	75	171 96					16 70	28 40					217 03
1907	November	71	125 21				13 88	20 00	34 55					193 64
1907	December	9	23 83				13 00	14 15	15 29					65 77
1906	January	22	82 40	8 00	23 76			16 97	30 77					80 14
1906	February	50	49 32	4 20	9 51		50 25	72 65	170 14					76 08
1906	March	63	62 80					23 25	54 19					389 55
1906	April 1st to 14th	14	25 27											100 71
		708	\$1180 90	\$19 30	\$101 94	60	\$111 33	\$280 35	\$612 83			\$3 60	\$7 50	\$2277 81

MISCELLANEOUS WORK.

Date.	Months.	Cleaning		Fountains.		Cutting Weeds.		City Yards.		City Hospital.		Haul'g Prisoners.		Washing Streets.		Miscellaneous.		Total.
		No. Loads Removed.	Cost.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	Material.	Labor.	
1897	April 20th to 30th.....																	
1897	May.....																	
1897	June.....																	
1897	July.....	51	\$ 346 74					\$ 9 61	\$ 10 78					353	\$ 222 08		\$ 67 95	\$ 310 87
1897	August.....	89	865 47						1 75					391	242 44		60 81	880 70
1897	September.....	60	427 87						1 75					147	205 08		1 75	811 46
1897	October.....	104	577 14											99	79 77		25 69	638 08
1897	November.....	69	490 02							\$ 81 50	\$ 23 63			215	118 60		88	551 67
1897	December.....	18	82 52											885	179 82		28 09	785 05
1898	January.....	167	891 69											224	96 50		40 19	694 71
1898	February.....	96	374 26											108	76 91	\$ 30 63	152 45	265 60
1898	March.....	67	306 12											63	42 12		14 00	482 60
1898	April 1st to 18th.....	85	155 04											15	7 89		46 45	462 88
														24	16 25		10 66	414 17
																	22 00	198 29
		706	\$3115 87					\$ 9 61	\$ 14 28	\$ 81 50	\$ 23 63			2019	\$1285 86	\$ 30 63	\$ 470 42	\$5980 48

Total Permits Issued for Excavations from April 19, 1897, to April 18, 1898.

Months.	Water.			Sewer.		Gas.		Miscellan. Permits.	Setting and Resetting Poles.					Totals.
	By Plumbers.			By Plumbers.		K. C. Mo. Gas Co.			Elec. Light Co. Telegraph Coa. Telephone.					
	Repairs.	Services.	Extensions.	Repairs.	Services.	Extensions.	Mains.		Services.	K. C. Co.	Amer. Co.	West. Union.	Postal Co.	Mo. & Kas. Tel. Co.
April 20 to 30, 1897	13	30	2	17	17	1	5	32	1	2	14		47	165
May	64	75	1	28	48	1	2	46		2	2		18	341
June	42	75	3	34	50	2	2	50		1	10		12	282
July	44	57	1	29	48	2	3	37	4	1	8	1	5	289
August	52	46	2	26	57	6	3	51	1	14	4	19	71	388
September	35	32	1	23	70		1	32	1	2		14	26	286
October	53	73	3	13	43	2		51				7	47	295
November	48	43		37	56			82		4	13		20	295
December	32	33	1	22	35		3	18	2	6			25	320
January, 1898	47	68	1	26	32		2	74		2		2	11	210
February	41	46		22	30		5	35			16		36	252
March	42	51	2	40	65		2	34			4			293
April 1 to 18	25	44		17	27			14					46	175
Total	532	822	16	346	577	8	23	626	12	40	66	43	415	3525

Summary—April 19, 1897, to April 18, 1898.

	Totals.	Totals.
Total Expense on Streets		
Total Expense on Alleys	\$62249 89	
Total Expense on Miscellaneous Work	2277 81	
Total Miscellaneous Expense Account	2814 61	77064 53
Estimate Value of Material on Hand		820 56
Total Expense to and Material on Hand April 18, 1898.		\$77875 08

ANNUAL REPORT
OF
A. W. LOVE,
SUPERINTENDENT OF BUILDINGS,

**For the Fiscal Year of 1897, Beginning April 19, Noon, 1897,
and Ending April 18, Noon, 1898.**

KANSAS CITY, Mo., April 18, 1898.

To the Honorable, the Board of Public Works, Kansas City, Mo.

GENTLEMEN: I beg to submit herewith a report of the operations of the Department of Buildings for the fiscal year 1897, beginning at noon on April 19th, 1897, and ending at noon April 18th, 1898.

I am pleased to state that the past year has been a particularly active one in building operations. Not since the "boom" years from 1885 to 1890 have the records shown so great an improvement. Delving a little into the reports of the office for the past five years, I find that the fiscal year just closed eclipses any of them. The fiscal year 1893 showed a total number of permits issued of 1363, at an estimated cost of \$998,746; fiscal year 1894, 1737, \$1,418,695; fiscal year 1895, 1773, \$1,601,800; fiscal year 1896, 1845, \$1,387,370; while for the fiscal year of 1897 there have been 2331 permits issued at a total estimated cost of \$2,001,310, exclusive of the amount issued by the City of Westport, prior to annexation to Kansas City last December, in the sum of \$250,000, and also not counting the large amount invested in new buildings in the territory which was contiguous to, but was not then a part of, either Kansas City or Westport, but which was included in the corporate limits of Kansas City at the recent extension of the city limits, and which may be safely approximated at \$100,000, making the immense aggregate of \$2,351,310 invested in building and building improvements within what is now the corporate limits of Kansas City during the past year. The total frontage of all the new buildings of which we have any record is 17,791 front feet, almost $3\frac{1}{2}$ miles of solid buildings, reaching more than the distance from Main street to Porter Road. Permits were given for 46 brick business buildings covering 1630 feet front and costing \$204,100; brick residence buildings, 173 permits, 4628 feet frontage, costing \$497,600; 26 permits for various other brick buildings, making a total of 245 permits, 6990 front feet and costing \$787,600. In frame buildings the record is equally as good, showing as it does permits for 437 frame residences, 9579 front feet and costing \$716,400; 31 various other frame buildings making the total number of frame building permits 468, 10,801 front feet and costing \$775,300, but \$12,300 less than the amount expended for brick buildings.

What should be considered a very encouraging feature of this showing is the fact that more than four-fifths of the total number of permits issued has been for residences, which proves beyond cavil the vast expansion of our population, when it is considered that it is practically impossible to rent a desirable house in Kansas City, the hundreds of new and desirable houses being rented, in many cases before a beginning is made toward building them. The above is no "fairy tale," as hundreds of house hunters in this city will bear witness. Many of our prominent real estate dealers and substantial building contractors, who can command ready cash, have within the past year or two, invested very largely in residence property on which they have erected neat and modern dwellings, which they have readily disposed of to home buyers, with a good margin of profit, on a small cash payment, the balance to be paid in monthly installments. This plan I consider a splendid way in which to build up our city and make it a city of home owners. There will, however, always be a large per cent of our population who will continue renters, and I wish that I might impress so strongly upon the minds of our wealthy men who now claim that they are "land poor," on account of owning large tracts of vacant property throughout all sections of the city, upon which they receive no returns, except the natural increase in valuation, caused by their more progressive fellow-citizens, who improve other property all around them,—I say I wish I might impress the fact upon them that there is the richest field on earth in Kansas City for investment in modest and inexpensive residences, costing from \$600 to \$1,500, and which could readily be rented for from \$120 to \$300 per year, thus making a net profit to their owners of from five to eight per cent on the investment, over and above taxes, insurance, repairs, street and sidewalk improvements, etc. Suppose a man owns, say \$750,000 worth of vacant property in the city limits, upon which he has to pay taxes of various kinds—all is outlay and no revenue coming back to him. Would it not be a good, sensible, business proposition for him to sell off, say half of it, even if he did not receive "boom time" prices for it, and take the money thus received and improve the other \$375,000 worth by building comfortable homes thereon, which would always bring him in a steady stream of revenue from the moment they were ready for occupancy? I venture the assertion that if the above plan was adopted by our millionaire land owners, who call themselves land poor, that Kansas City would soon hear the last wail of "park knockers" and all other kind of "knockers," because, as a rule, when men have a golden stream flowing into their pockets, they do not ordinarily kick on an expenditure of a few hundred dollars for needed public improvements. I simply throw this out as a suggestion and believe it would be the best thing that ever happened to Kansas City, as well as to our rich land owners, if it was at once acted upon.

During the fiscal year just closed, I have to report that the new work house, for which our city has long been in need, has been fully completed and equipped with every modern convenience, at a cost of \$25,700. I do not hesitate to affirm that there is not a city prison in the country costing the same or less money, that approaches it in every detail. The style of archi-

itecture is unique and imposing. The arrangements for light, heat, ventilation and bath service are all that could be asked. Nothing has been left undone that could add to the comfort, health, safety and convenience of the inmates and attendants. In the laundry department at the work house, there should be a drying room added, some modern laundry machinery should be installed, and some additional tubs provided. All of the immense laundry business of the city hospital is done at the work house, as well as the work house laundry itself, by the prisoners, and proper facilities should at once be added for this purpose, costing, perhaps, \$1,500. There are several horses, the property of the city, required in the transaction of the business of the work house. Proper stable accommodations are not now afforded for them, and I would therefore recommend the erection, the coming summer, if possible, of a stone barn, costing not to exceed \$3,000. With the improvements above noted, everything about the work house premises will be in complete shape.

During the past year a clinic addition, or operating room, was constructed at the City Hospital at a cost of \$4,000. It is conceded by practical surgeons to be one of the best of its kind in the West, and it was an improvement which was very badly needed. The leading demonstrators of surgery, composing the faculties of the various medical colleges in the city, each use one day in every week, from September to March, in each year, in this new clinic, to practically demonstrate scientific surgery, before large classes of their students, for whom comfortable seats are arranged in tiers, so that all may see and hear all that is said and done. Partial, but very essential, and somewhat in the nature of temporary, repairs were made in the old part of the hospital building, which cost \$3,000. It had been intended to thoroughly overhaul and remodel the old building, but sufficient funds were not available the past year, so that nothing was done except what was absolutely necessary. I would recommend an appropriation of \$10,000, expending so much thereof as may be necessary to thoroughly remodel and overhaul the old building, of which it is very badly in need. It should be thoroughly modernized and put in keeping with the new part built in 1895 and 1896. Even with the new addition just referred to, the City Hospital is becoming sadly overtaxed, many worthy charity cases being turned away for lack of room, that should be properly taken care of. Still another new addition to cost \$15,000 to \$18,000 is imperatively required, which would give additional room for from 75 to 100 more beds. The City Council, by a joint resolution recently passed, has directed me to prepare plans and estimates for this addition, and I expect soon to have the plans and estimates ready for inspection. This new addition is badly needed, and I trust that funds will be forthcoming for its construction. When the first addition was being contemplated the joint financial committees of the Common Council, the City Physician and myself went before the County Court and requested aid in its construction, for the reason that a very large number of the patients cared for at the City Hospital should be, and are properly, charges upon the county, and we thought and still think it no more than just and right that the county should

pay at least its proper share of the cost of building and equipping the new addition to the City Hospital, even if it did not contribute toward the care and maintenance of the patients therein. The Honorable County Court promised to take the matter under advisement and that is the last ever heard from it. It might be well enough to pay the court a second visit and say "that now that a second addition is necessary in order to properly care for the many county charges we trust they will 'advise' the setting aside of a handsome appropriation towards assisting in paying for it."

In my report for the fiscal year 1896, I made use of the following language, which I will now quote: "Steps have recently been taken by a joint committee of the Common Council looking to the betterment of the condition of the City Market House. Under their direction I have recently prepared plans and estimates, which, if properly carried out, will make a decided change for the better and at the same time add largely to the city's revenue from that source. Better City Market House conditions is one of the crying needs of the city. I am also favorable to the plan of heating the City Market House with steam from the City Hall plant, as is now done in furnishing it electric light, and I believe the project could be successfully carried out without very great additional expense to the city. The Market House should by all means be improved in order that the city could rent its space to a more desirable class of tenants, many of whom will not come there under present conditions. Let us have an improved Market House as well as a new Work House and City Hospital." Nothing has been done along the line of the above recommendations the past year and I would therefore again urge that this important and very much needed improvement be at once made, as the increased revenue would very soon pay for the entire outlay necessary for that purpose. The alley between the City Hall and Market House is also in a deplorable condition and should be paved with asphalt very soon.

Regarding the operations of the anti-smoke ordinance, for the enforcement of which this department, in connection with the Police Department is responsible, I will state that I find that it is one of the most complex and intricate problems with which any city has ever had to contend. Many other cities in different sections of the country have been wrestling with the smoke abatement problem for many months, and some of them for years; and whilst many cities have succeeded, in a manner, in abating the smoke nuisance, none have been more successful than Kansas City, but the question of complete smoke abatement is as yet one of the great unsolved problems. After we got our City Hall smoke abatement device in successful operation, so that we were not ashamed to let the owners of the other smoke-making chimneys in the city look at them, I sent out several hundred notices to the owners and operators of the various smoke-making chimneys throughout the city, directing that immediate steps be taken toward complying with the ordinance abating smoke. Many people at once began the use of what is known as Semi-Anthracite or Smokeless Coal, others put in various smoke-consuming devices, some of which consume smoke, and some of which do not. There

are a few devices on the market which will do the work reasonably well. Others, which will do good work on one boiler, will prove a failure on some other boiler of perhaps the same make. Some will work all right in St. Louis or Chicago and prove a flat failure in Kansas City, and *vice versa*. We are now using on the boilers of the City Hall plant what, after numerous trials of others, has so far proven to be the best and least expensive, but which will only do good work when placed on boilers which are not required to do exceedingly heavy work. The use of semi-anthracite coal, with a good draught, well cleaned smoke-stack and careful firing by the person in charge, must be considered a reasonable compliance with the ordinance, as with proper care the minimum amount of smoke is emitted. By the exercise of due diligence on the part of my own and the Police Department, and a proper degree of patience by our long-suffering and smoke-begrimed citizens, we hope soon to finally unravel the whole problem so that the blue sky will be visible on a clear day in all parts of Kansas City. We shall at least keep on trying so long as the ordinance is unrepealed, and we sincerely hope that will never happen.

The new Building Ordinance, which is now a part of the new revised ordinances of Kansas City, is a very great improvement over the old ordinance under which we had heretofore been working, and which was conflicting, ambiguous and lame in many respects. I gave diligent study and care in the drafting of the new ordinance and believe that it is about as good as the Building Ordinance of any city in the country.

By a reference to that part of my report showing notices served on account of unsafe structures, it will be noticed that the department has not been idle along that line, as 253 official notices of various kinds were served, 27 buildings being condemned and ordered torn down, and 57 buildings ordered repaired and put in safe condition.

By the recent extension of the city limits, the territory of Kansas City was just about doubled. In order to properly cover this great increase in territory and at the same time look carefully after the great and growing building business throughout all sections of the city, it will be absolutely necessary that the department be supplied with three additional Inspectors, one, whose duty it shall be to give his entire time and attention to the proper enforcement of the anti-smoke ordinance, and the other two to properly cover the large annexed territory. At the proper time I shall ask your honorable body to recommend for favorable consideration by the Common Council an ordinance embodying this recommendation.

Many changes will soon be necessary in the interior arrangement of the City Hall in order to properly take care of the large and growing business of the different departments. I think that every department of the municipal government, including the Board of Election Commissioners, should, if possible, be kept in the City Hall, and it may become necessary, in the near future, in some manner yet to be decided upon, to enlarge the office floor space in the City Hall building by additions or otherwise.

By reference to the subjoined tables the work in detail of the department for the year will be noted :

Building Permits Issued as Follows by Months:

APRIL, 19, NOON, TO APRIL, 30, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
1	Brick business	20	\$400 00	\$ 50
7	Brick residence	170	24000 00	13 85
7	Frame residence.	158	8400 00	4 25
72	Miscellaneous permits		14840 00	38 25
87	Totals	348	\$49140 00	\$56 85

MONTH OF MAY, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
20	Brick residence	558	\$44600 00	\$22 80
1	Brick barn	24	1000 00	50
1	Brick blacksmith shop.	14	900 00	50
30	Frame residence.	224	56200 00	28 60
1	Frame warehouse.	50	1000 00	50
168	Miscellaneous permits		60770 00	105 90
216	Totals	868	\$182870 00	\$158 80

MONTH OF JUNE, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
2	Brick business	84	\$7200 00	\$4 00
13	Brick residence	371	30400 00	16 25
1	Brick church.	40	3000 00	1 50
28	Frame residence	223	42900 00	21 75
1	Frame barn.	50	1600 00	80
106	Miscellaneous.		20570 00	54 00
148	Totals	768	\$106370 00	\$98 80

MONTH OF JULY, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
3	Brick business	175	\$12500 00	\$ 6 00
11	Brick residence	294	35700 00	18 40
2	Brick barn	56	3500 00	2 00
1	Brick warehouse	65	4000 00	4 00
1	Brick office.	30	1000 00	50
30	Frame residence.	609	14000 00	25 05
1	Frame barn	18	300 00	50
1	Frame warehouse	40	100 00	50
135	Miscellaneous permits		35280 00	74 56
166	Totals	1317	\$144180 00	\$139 50

MONTH OF AUGUST, 1897.

No. of Permits.	Kind of Building	Front Feet	Estimated Cost	Fees
3	Brick business	117	\$24000 00	\$12 00
11	Brick residence	300	31600 00	15 75
1	Brick barn	16	1000 00	50
1	Brick market house	50	7000 00	3 50
33	Frame residence.	770	38100 00	30 50
1	Frame blacksmith shop	70	500 00	50
119	Miscellaneous permits		30240 00	61 75
169	Totals	1497	\$151040 00	\$129 50

Building Permits Issued as Follows by Months—Continued.

MONTH OF SEPTEMBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
4	Brick business.....	102	\$1400 00	\$ 7 75
19	Brick residence.....	468	54800 00	27 15
1	Brick barn.....	24	1600 00	80
2	Brick church.....	188	30200 00	15 10
1	Brick boiler house.....	20	1200 00	60
1	Brick work shop.....	20	200 00	50
48	Frame residence.....	950	46500 00	29 15
1	Frame church.....	32	2000 00	1 00
1	Frame warehouse.....	60	5000 00	2 50
1	Frame flouring mill.....	60	2500 00	1 25
1	Frame coke house.....	32	1600 00	80
208	Miscellaneous permits.....		52000 00	106 45
278	Totals.....	1906	\$212790 00	\$196 05

MONTH OF OCTOBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
7	Brick business.....	384	\$25200 00	\$12 35
16	Brick residence.....	369	42800 00	21 25
1	Brick barn.....	15	100 00	50
1	Brick laundry.....	50	3400 00	1 70
1	Frame business.....	18	400 00	30
27	Frame residence.....	615	22100 00	21 00
1	Frame barn.....	16	800 00	50
1	Frame church.....	20	300 00	50
164	Miscellaneous permits.....		30620 00	145 20
219	Totals.....	1417	\$147220 00	\$145 10

MONTH OF NOVEMBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
2	Brick business.....	72	\$6500 00	\$ 3 25
20	Brick residence.....	523	59700 00	29 85
3	Frame business.....	54	1700 00	1 50
32	Frame residence.....	752	52200 00	26 00
1	Frame church.....	42	2000 00	1 50
123	Miscellaneous permits.....		45240 00	75 00
181	Totals.....	1443	\$108940 00	\$137 70

MONTH OF DECEMBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
1	Brick business.....	185	\$55200 00	\$27 05
9	Brick residence.....	236	29700 00	14 90
30	Frame residence.....	709	51200 00	26 25
1	Frame barn.....	16	800 00	50
49	Miscellaneous permits.....		10240 00	26 15
90	Totals.....	1146	\$146940 00	\$108 25

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Building Permits Issued as Follows by Months:—Continued.

MONTH OF JANUARY, 1908.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
5	Brick business	182	\$2700 00	\$4 75
8	Brick residence.	278	\$1500 00	20 75
1	Brick boiler house	18	800 00	50
1	Frame	50	900 00	50
28	Frame	727	\$7100 00	20 20
1		90	2000 00	1 00
1		42	1000 00	5 00
66			22820 00	25 25
111	Totals.	1332	\$130090 00	\$96 96

MONTH OF FEBRUARY, 1908.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
8	Brick business	160	\$1000 00	\$2 25
6	Brick residence	138	13800 00	6 75
1	Brick barn	42	1700 00	1 25
47	Frame residence	1010	68600 00	25 25
2	Frame barn	200	19700 00	8 25
1	Frame office	20	1000 00	50
83	Miscellaneous permits.		22400 00	44 25
146	Totals	1669	\$137080 00	\$106 70

MONTH OF MARCH, 1908.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
5	Brick	118	\$5700 00	\$3 75
16	Brick residence	501	60000 00	24 55
3	Brick barn	51	1800 00	1 55
1	Frame business	24	1100 00	50
64	Frame residence.	1806	127000 00	66 05
1	Frame barn.	20	600 00	50
1		24	1000 00	50
1		30	1000 00	50
1		50	1200 00	60
1		48	1000 00	50
216			47670 00	111 90
319	Totals	2671	\$245670 00	\$216 90

APRIL 1, TO NOON APRIL, 18, 1908.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
4	Brick business	142	\$25500 00	\$12 75
7		179	21500 00	10 75
1		26	1500 00	75
1	ks.	50	11000 00	5 50
1		64	8000 00	1 50
1		45	4000 00	2 00
1		25	1200 00	60
1		25	1000 00	50
48		967	67400 00	36 00
1		16	200 00	50
118			23010 00	63 50
179	Totals	1539	\$160410 00	\$134 95

Building Permits Issued as Follows by Months:—Continued.**MONTH OF SEPTEMBER, 1897.**

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
4	Brick business.....	102	\$14600 00	\$ 7 75
19	Brick residence.....	468	54800 00	27 15
1	Brick barn.....	24	1600 00	80
2	Brick church.....	138	30200 00	15 10
1	Brick boiler house.....	20	1200 00	60
1	Brick work shop.....	20	200 00	50
43	Frame residence.....	950	46500 00	29 15
1	Frame church.....	32	2000 00	1 00
1	Frame warehouse.....	60	5000 00	2 50
1	Frame flouring mill.....	60	2500 00	1 25
1	Frame coke house.....	32	1600 00	80
203	Miscellaneous permits.....		59090 00	109 45
278	Totals.....	1906	\$212790 00	\$196 05

MONTH OF OCTOBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
7	Brick business.....	384	\$25200 00	\$12 35
16	Brick residence.....	399	42500 00	21 85
1	Brick barn.....	15	100 00	50
1	Brick laundry.....	50	3400 00	1 70
1	Frame business.....	18	400 00	50
27	Frame residence.....	615	38100 00	21 00
1	Frame barn.....	16	300 00	50
1	Frame church.....	20	300 00	50
164	Miscellaneous permits.....		36820 00	86 20
219	Totals.....	1417	\$147220 00	\$145 10

MONTH OF NOVEMBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
2	Brick business.....	72	\$6500 00	\$ 3 25
20	Brick residence.....	523	59700 00	29 85
3	Frame business.....	51	1700 00	1 50
32	Frame residence.....	752	52800 00	26 60
1	Frame church.....	42	3000 00	1 50
123	Miscellaneous permits.....		45240 00	75 00
181	Totals.....	1443	\$168940 00	\$187 70

MONTH OF DECEMBER, 1897.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
4	Brick business.....	185	\$55300 00	\$27 65
9	Brick residence.....	236	29700 00	14 90
30	Frame residence.....	709	51300 00	26 35
1	Frame barn.....	16	300 00	50
49	Miscellaneous permits.....		10240 00	36 85
93	Totals.....	1146	\$146840 00	\$106 25

Building Permits Issued as Follows by Months:—Continued.**MONTH OF JANUARY, 1898.**

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
5	Brick business.....	182	\$8700 00	\$1 75
8	Brick residence.....	278	81500 00	20 75
1	Brick boiler house.....	18	800 00	50
1	Frame business.....	50	900 00	50
28	Frame residence.....	727	57100 00	29 20
1	Frame work house.....	90	2000 00	1 00
1	Frame grain elevator.....	42	10000 00	5 00
66	Miscellaneous permits.....		28640 00	85 25
111	Totals.....	1882	\$189680 00	\$96 95

MONTH OF FEBRUARY, 1898.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
4	Brick business.....	160	\$14000 00	\$9 25
4	Brick residence.....	158	13300 00	6 75
1	Brick barn.....	42	1700 00	1 25
47	Frame residence.....	1010	68900 00	85 25
2	Frame barn.....	200	16700 00	8 85
1	Frame office.....	20	1000 00	50
83	Miscellaneous permits.....		22460 00	44 85
146	Totals.....	1509	\$187080 00	\$106 70

MONTH OF MARCH, 1898.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
5	Brick business.....	118	\$9700 00	\$3 75
16	Brick residence.....	501	54600 00	24 55
8	Brick barn.....	51	1800 00	1 55
1	Frame business.....	24	1000 00	50
64	Frame residence.....	1405	127000 00	64 05
1	Frame barn.....	20	600 00	50
1	Frame church.....	24	1000 00	50
1	Frame planing mill.....	80	1000 00	50
1	Frame blacksmith shop.....	50	1200 00	60
1	Frame ice house.....	48	1000 00	50
215	Miscellaneous permits.....		47670 00	111 90
319	Totals.....	2671	\$245870 00	\$216 90

APRIL 1, TO NOON APRIL 18, 1898.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
4	Brick business.....	142	\$25500 00	\$12 75
7	Brick residence.....	170	21500 00	10 75
1	Brick warehouse.....	28	1500 00	75
1	Brick Salvation Army B'ks.....	50	11000 00	5 50
1	Brick ice plant.....	64	3000 00	1 50
1	Brick wash house.....	45	4000 00	2 00
1	Brick work shop.....	25	1200 00	60
1	Frame business.....	25	1000 00	50
48	Frame residence.....	967	67400 00	35 00
1	Frame barn.....	16	300 00	50
118	Miscellaneous permits.....		23010 00	63 50
179	Totals.....	1539	\$196410 00	\$134 95

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Summary for the Year by Months:

No. of Permits.	Months.	Front Feet.	Estimated Cost.	Fees.
87	April 19th, noon, to April 30th, 1897....	348	\$ 49140 00	\$ 56 85
216	May, 1897.....	888	182870 00	158 80
148	June, 1897.....	768	105370 00	98 30
185	July, 1897.....	1347	144180 00	136 50
169	August, 1897.....	1107	151910 00	128 90
278	September, 1897.....	1908	212790 00	196 05
219	October, 1897.....	1417	147220 00	145 10
181	November, 1897.....	1418	168940 00	187 70
93	December, 1897.....	1116	146810 00	108 25
111	January, 1898.....	1332	139680 00	96 95
146	February, 1898.....	1590	137060 00	105 70
319	March, 1898.....	2671	245870 00	216 90
179	April 1st, noon, to April 18th, 1898.....	1580	169410 00	184 95
2331	Totals.....	17791	\$2001810 00	\$1716 95

Classified Summary of Brick Buildings.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
46	Brick business.....	1630	\$ 204100 00	\$ 104 00
173	Brick residence.....	4628	497600 00	247 60
10	Brick barn.....	228	10100 00	7 10
8	Brick church.....	178	33200 00	16 60
2	Brick warehouse.....	91	9500 00	4 75
2	Brick boiler house.....	38	2000 00	1 10
2	Brick work shop.....	45	1100 00	1 10
1	Brick office.....	30	1000 00	50
1	Brick market house.....	99	7000 00	8 50
1	Brick laundry.....	50	3400 00	1 70
1	Brick blacksmith shop.....	11	300 00	50
1	Brick ice plant.....	64	8000 00	1 50
1	Brick Salvation Army Barracks.....	50	11000 00	5 50
1	Brick wash house.....	45	4000 00	2 00
245	Totals.....	6990	\$787600 00	\$397 45

Classified Summary of Frame Buildings.

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
7	Frame business.....	171	\$ 5000 00	\$ 8 50
437	Frame residence.....	9579	716400 00	882 45
8	Frame barn.....	338	20100 00	11 65
1	Frame church.....	118	6300 00	8 50
4	Frame warehouse.....	240	8400 00	4 50
2	Frame blacksmith shop.....	125	2000 00	1 10
1	Frame office.....	20	1000 00	50
1	Frame flouring mill.....	60	2500 00	1 25
1	Frame grain elevator.....	42	10000 00	5 00
1	Frame coke house.....	32	1800 00	80
1	Frame planing mill.....	30	1000 00	50
1	Frame ice house.....	48	1000 00	50
468	Totals.....	10801	\$775900 00	\$415 25

Summary of Miscellaneous Permits by Months:

No. of Permits.	Months.	Estimated Cost.	Fees.
72	April 19th, noon, to April 30, 1907.....	\$11340 00	\$ 88 25
163	May, 1907	60770 00	105 90
104	June, 1907	20570 00	54 00
135	July, 1907.....	35240 00	78 55
119	August, 1907	30240 00	68 75
243	September, 1907	53000 00	110 75
164	October, 1907	30820 00	85 20
123	November, 1907	45240 00	75 00
49	December, 1907	10240 00	86 85
68	January, 1908	24090 00	35 25
53	February, 1908	22460 00	44 85
215	March, 1908	47570 00	111 90
114	April 1st to noon April 18, 1908	35010 00	63 50
1618	Totals	\$438410 00	\$904 25

General Summary for the Year:

No. of Permits.	Kind of Building.	Front Feet.	Estimated Cost.	Fees.
245	Brick Building	6000	\$787000 00	\$207 45
408	Frame building	10000	775300 00	415 25
1618	Miscellaneous permits		438410 00	904 25
2271	Grand Total for Year	17701	\$2001310 00	\$1716 95

Statement Showing Receipts for Money Deposited With the City Treasurer:

Date.	Amount.	Date.	Amount.	Date.	Amount.
April 30, 1907.	\$56 55	Sept. 9, 1907 ..	\$37 60	January 20	36 75
May 12	83 35	September 16	10 65	January 27	29 45
May 30	41 70	September 24	37 35	February 5	10 75
May 27	45 95	September 30	69 85	February 9	24 00
May 29	87 80	October 12	34 90	February 21	32 10
June 10	31 60	October 20	30 65	February 28	27 10
June 18	24 00	October 27	36 15	February 28	22 50
June 28	21 65	October 30	38 40	March 12	35 65
July 1	21 05	November 10	29 75	March 17	41 35
July 9	19 85	November 19	33 35	March 25	51 10
July 17	36 75	November 23	31 35	March 31	68 40
July 24	36 30	December 1	10 25	April 12	13 75
July 31	43 60	December 11	25 25	April 16	91 20
August 12	28 35	December 17	13 25		
August 30	32 00	December 29	8 15	Total	\$1716 95
August 27	28 90	December 31	29 50		
September 4	38 25	January 11, 1908	20 00		

List of Official Notices of Unsafe Structures Served During the Year:

KIND OF NOTICES SERVED.	NO.
Buildings condemned and ordered torn down.....	27
Unsafe buildings ordered repaired.....	57
Down spouts ordered connected with sewer.....	36
Gutters and down spouts ordered placed on buildings.....	20
Porches ordered repaired and put in safe condition.....	21
Fire escapes ordered placed on buildings.....	5
Chimneys ordered repaired and placed in safe condition.....	27
Steps ordered repaired and placed in safe condition.....	11
Gutters, down spouts and sewer connections ordered repaired.....	4
Chimneys ordered built higher so as to carry off smoke.....	4
Brick walls ordered repaired and put in safe condition.....	2
Stairs ordered repaired and placed in good condition.....	4
Dangerous retaining wall ordered torn down.....	3
Railing around platform of fire escape ordered repaired.....	2
Water closet ordered repaired and put in safe condition.....	2
Sheds projecting into alley ordered removed.....	3
Unsafe sheds ordered torn down.....	4
Stone retaining wall ordered repaired.....	2
Wooden platform ordered repaired.....	1
Water barrels and buckets ordered placed in factory.....	1
Retaining wall ordered repaired.....	1
Floor ordered repaired.....	1
Walls ordered whitewashed.....	1
Water closet ordered put in sanitary condition.....	1
Prismatic lights over area ordered repaired.....	1
Chimney ordered torn down.....	1
Iron shutters ordered repaired.....	1
Stairway ordered repaired and removed from alley.....	1
Frame water closet ordered torn down.....	1
Trap door in sidewalk ordered repaired.....	1
Building in street ordered moved back to lot line.....	1
Retaining wall ordered built.....	1
Unsafe water tower and tank ordered torn down.....	1
Grating over area ordered repaired.....	1
Portable fire escape ordered torn down.....	1
Dangerous top story ordered taken off of brick building.....	1
Building projecting into street ordered removed.....	1
Total number of official notices served.....	258

Pay Roll of the Department for the Year by Months:

Months.	Amount.
April 10th, noon, to April 30, 1897.....	\$245 84
May, 1897.....	548 50
June, 1897.....	549 93
July, 1897.....	578 73
August, 1897.....	570 13
September, 1897.....	570 13
October, 1897.....	570 13
November, 1897.....	574 13
December, 1897.....	580 98
January, 1898.....	570 13
February, 1898.....	548 53
March, 1898.....	580 93
April 1st to noon April 18, 1898.....	813 63
Total for year.....	\$6896 67

Respectfully Submitted,

SAM. E. BEAR, Clerk.

A. W. LOVE,
Superintendent of Buildings.

REPORT

OF THE

Superintendent of the Water Department,

FOR 1898.

OFFICERS OF THE WATER WORKS DEPARTMENT.

Water Commissioners—GEO. S. GRAHAM, President.

GEO. P. HARDESTY,

M. V. WATSON,

B. T. WHIPPLE.

Secretary—R. M. GODFREY.

Superintendent—D. W. LONGWELL.

Chief Clerk—CHAS. F. RICKERT.

Engineer—WYNKOOP KIERSTED.

Assessor and Collector Water Rates—C. S. SQUIER.

Chief Clerk—J. B. LAWRENCE.

Engineer in Charge Turkey Creek Station—JOSEPH L. CHAPMAN

Engineer in Charge Quindaro Station—JOHN F. SICKELS

October 27th, 1898.

To the Honorable Board of Public Works,

Kansas City, Mo.

GENTLEMEN:—I submit herewith the Second Annual Report of the Water Department, being for the fiscal year 1897.

QUINDARO.

The total pumping capacity at this station is now 44 million gallons daily, it having been augmented by the seven million gallon engine removed from Turkey Creek. It is so connected that we have a possible 29 million daily capacity into basins, and a possible 26 million daily capacity out of basins to Turkey Creek, one of the 11 million engines being connected both ways.

The pumping engines and boilers are in good condition.

On the 16th of May, when we were cleaning No. 2 basin, the outside wall being built of stone eight feet high, four feet through at the base, battered to two feet at the top, set on ten feet of clay, started to settle and slide into the basin, crushing the wall so that it had to be taken out entirely, and the fact developed that the bank upon which the wall rested was composed of layers of material called gumbo, which, when becoming saturated with water, has a tendency to slide. The slope covering of this bank had become disintegrated to such an extent that the bank was perfectly saturated, which was no doubt the cause of the slide. All of the earth that had moved in the slide was moved into the basin, and everything of a gumbo nature taken out of the bank and washed away, so that when the bank was rebuilt there was no material used except the best clay that could be found upon the bluffs above the station. This sliding material was found to permeate the whole bank in different layers, and in some points two feet below the level of the bottom of the basin, but it was all removed and replaced with good clay.

The design of the bank was changed upon the recommendation of City Engineer Wise and Assistant City Engineer Mitchell, under plans now on file in your office, and in this connection I would refer you to report of the Chief Engineer accompanying this.

After removing the clay in the bank, the water was turned upon it at the suggestion, (with my approval), of Chief Engineer Pearsons, and while we were doing some repairs and cleaning No. 3 basin, No 2 being partly filled with water, a section of the partition wall between 2 and 3, four feet in height and sixteen feet in length, broke through into No. 3 basin, washing a hole under the wall some ten feet deep, and carrying out the masonry and the timber foundation. This sudden drawing off of the water from No. 2 basin caused further damage to the north bank of No. 2 basin, all of which was repaired during the fall of '97.

Further repairs to this wall were made by excavating under the timber foundation the entire length of the wall to a depth of two feet by three feet, and concreting, giving a better footing to said wall and guarding against danger of a washout under the wall.

Further repairs were made in the bottom of No. 3 basin in the filling up with concrete of holes washed out of the bottom, the old concrete covering having disintegrated. The slope of No. 3 basin was repaired by plastering, and pilasters two feet by three feet, with a four-foot footing, were placed in the slope every thirty feet from its bottom to the top and under the outside wall, with a view of preventing a slide similar to the one which occurred in No. 2.

Further repairs was the repointing of the top of all of the outside walls, the removal of disintegrated stone and replacing with good stone, a six-inch coping of Portland cement on the outside wall.

We have used Portland cement in all work where it will be exposed to alternate freezing and thawing, as well as in the filling of the conduit. As noted in Mr. Kiersted's report, further repairs will be necessary the coming fall in the other partition walls, and as weak points are found during the development of the work they will be remedied so that when the work is completed we will feel that our basins will be safe to operate in any condition which may arise, and that they will be better and safer than when originally constructed. It is our intention to make them as good as the best material and workmanship, together with the scientific knowledge of our Chief Engineer can make them. The total cost of such repairs to date is \$27,118.37.

Our estimate with our present knowledge for further repairs is \$20,000, but when we get into the bottom of basin No. 4, which the subscriber has never seen, we may find further expense necessary. If so, it will be gone into thoroughly.

FLOW LINE.

We have had several breaks in the flow line in the past year, but they have been repaired at small cost and no inconvenience to the system, as the low service suction pump placed last year at Turkey Creek Station has been taking the water away from the breaks as it was intended to do, so that the men were not interfered with in their repairs.

We found the piers carrying the bridge over Jersey Creek on which our 30-inch flow line rests, disintegrated to such an extent that the foundation and piers were almost hollow. The two piers have been repaired and made permanently solid and safe, while a new covering was put upon the bridge proper and upon the pipe.

The Kaw River bridge was scraped and repainted and refloored, at an expense of about \$800, giving the bridge three coats of lead and oil. An additional riprapping was placed around the iron piers of said bridge in Kaw River.

The long disputed point of pump slippage of the Metropolitan Company's ten million Worthington pump at Kaw Point Station, which was the arrangement made by my predecessor in conjunction with Chief Engineer Pearsons with the Metropolitan Water Company for the measurement of all water delivered to Metropolitan Water Company under decree of U. S. Court, has been settled by arbitration—the report of the arbitrants—Professor David M. Greene of Troy, N. Y., Lee M. Riley, Chief Engineer of Metropolitan Water Company, Kansas City, Kansas, and Wynkoop Kiersted, Chief Engineer of Kansas City, Missouri Water Department, rendering a unanimous verdict in favor of Kansas City, Missouri, Water Department of \$7,400, thereby fully substantiating all claims of this department in points in dispute.

TURKEY CREEK STATION.

Turkey Creek Station has been improved very much in the past year by the completion of our new ten million pumping engine, together with the two 300 H. P. water tube boilers, and the placing of the engine in service in December of '97. The

engine and boilers have run continuously since February 6th, and show that they are great coal savers, as the maximum consumption of coal per day has been reduced from 84,000 pounds to about 64,000 pounds, showing a net saving of coal of about 10 tons per day. In this connection I would again call your attention to the engineer's report, as he has gone into details, making a comparison which shows very creditably to our new investment in engine and boilers.

Further improvements at Turkey Creek is the connecting of all suction lines to the small basin so that now we are able to clean the basins without interfering with the running of the station. All of these improvements have cost a great deal of money, but they are necessary and are of the most permanent kind.

For further improvements at this station I would repeat my recommendations of last year, viz.:

A retaining wall on our Turkey Creek frontage.

A switch built into our grounds, together with a storeroom, machinery and blacksmith shop in a building separate from present boiler and engine house.

DISTRIBUTING PLANT.

This part of the system has been quite largely added to in the past year by the laying of 6.655 miles of mains, the different sizes of which the Foreman of the Street Division embodies in his report accompanying this statement, together with 13.1493 miles received from Westport, which includes 3,902 feet of 10-inch, 9,725 feet of 8-inch, 51,657 feet of 6-inch, and 4,759 feet of 4-inch, with 109 fire hydrants.

I wish to repeat my suggestion of last year regarding the necessity of additional fire engines for the Fire Department, and to especially call the attention of your honorable body to the danger we constantly incur by placing the extreme fire pressure so frequently upon our 30-inch main, upon which we are so dependent for water to supply the Fire Department during the progress of a large fire, and to again call your attention to the very urgent necessity of an additional main from Turkey Creek Station through the business portion of the city to some point east of Grand Avenue.

The Chief Engineer makes this recommendation in his report.

and I would suggest to your honorable body that a resolution be passed recommending to the Honorable Mayor and the Common Council that a certain sum be set aside from the water department fund for this purpose, so that this improvement can be made in the next year.

The increase in operating expenses has been caused by the changing from twelve-hour shifts to eight-hour shifts, increased coal consumption, caused by increased pumpings, the lowering of mains made necessary by change of grades, the moving of fire hydrants made necessary by the narrowing of streets, and the Park Board's boulevard work, as well as the increased work of all the divisions of this department, which will show by the accompanying reports of the heads of the different divisions.

The gross receipts being \$426,000 and the operating expenses \$132,000, leaving \$294,000 over and above operating expenses, which is over nine per cent on our bonded indebtedness, proves municipal ownership a success.

I wish to thank the Board for the united support they have given the department in all its efforts to place the plant in the best possible physical condition.

Respectfully submitted,

D. W. LONGWELL,

Superintendent.

KANSAS CITY, MO., April 20, 1898.

D. W. Longwell, Superintendent Water Department.

DEAR SIR:—I have the honor to submit herewith a report upon the present condition of the water works and the improvements in progress and in contemplation.

RIVER SUCTION.

The intake crib at the Missouri River is too high to be serviceable at all times during the winter months. In consequence of this situation, an auxiliary suction thirty-six inches in diameter has been constructed for use when the level of the river falls below the inlet to the crib. The experience in the use of this auxiliary suction pipe during the winter of '97 demonstrated the advisability of extending this suction pipe deeper and outward into the river. A special casting has been made to serve this purpose, and it is recommended that the extension be made as early in the winter of '98 as may be found practicable.

SETTLING BASINS.

The method which is being pursued in the repairs to the embankment of basin No. 2 substitutes a light wash wall about two feet high of paving brick laid in Portland cement mortar for the heavy "ice wall" eight feet high of the original construction, improves the character of the earth work in the embankment, provides for a six-inch concrete and nine-inch paving brick covering for the inner slope, and will afford a greater degree of stability to the embankment. Thus far sufficient precaution has not been taken to prevent the formation of small channels for water at the points of contact of the ends of the earth embankment with the partition walls and the east retaining wall, nor yet to prevent seepage around the ends of the partition walls where they terminate in the earth embankment, and thereby avoid an unequal degree of saturation and a proportionate unequal tendency to slide. A cut-off wall, such as it is customary to use in such instances, is being constructed between the embankment of basin No. 2 and the partition wall between basins 2 and 3. The embankment of the other basins may yet require a similar protection.

The disintegrated masonry in the upper three feet of the partition wall between basins 2 and 3 has been replaced by a wall composed both of paving brick in Portland cement mortar and of Portland cement concrete. This improvement includes the substitution of a brick arch over the upper conduit for the plank cover originally put in. The work has been done in accordance with plans submitted November 19, 1897.

As originally constructed, the partition wall possesses insufficient width from a level twelve feet below the top of the wall downward to the base. At a level of the bottom of the reservoir it has a width of but 10 feet 3 inches between the line of the battered faces, whereas the thickness should have been 14 $\frac{1}{3}$ feet. The wall should also have a deeper footing in order to sustain without yielding the pressure of a full head of water on one side of the wall when the basin on the opposite side is emptied. The National Water Company braced the wall with three masonry buttresses on each side and with intermediate timber and pile supports. The buttresses are not bonded into the wall and the timber work is elastic, consequently the wall con-

tinues to yield under pressure. The concrete filling already put into the lower conduit by your direction, increases the weight of the wall and proportionately increases its stability, yet this additional weight scarcely gives the security which is necessary in a reservoir wall of this character.

There was submitted in March, 1898, a detailed plan, a specification, a bill of material, and an estimate of cost of the work which is yet necessary to complete the reinforcement of this wall. It provides for eight additional buttresses on each side of the wall, securely bonded thereto, and supported on a broad foundation of concrete. These buttresses are intended to replace the yielding and therefore unsafe timber braces.

At least three more of the partition walls need strengthening. Plans are now in progress for this work, and will proceed along lines similar to those just outlined for the partition wall between basins 2 and 3. The fourth partition wall between basins 1 and 4, which once failed at the lower conduit, is reported to have been rebuilt of heavier masonry, but without an increased spread of base. Such repairs as may be needed for basins 4 and 1 can be developed only when these basins shall have been emptied for cleaning.

If overflow weirs be constructed in the partition walls as they are repaired, then the water in passing from one basin to another will flow in a thin sheet over the weir and will result, it is believed, in clearer and a better settled water than is possible by the method now in use.

QUINDARO PUMPING STATION.

The nominal capacity of the low service pumping engines at this station is 44 million gallons per 24 hours. The machinery is in good condition except for some needed repairs due to ordinary "wear and tear" of machinery, resulting from ten or more years of constant use. The average daily coal consumption per one million gallons of water delivered to the city in 1896 was 2,108 pounds, while that of the present fiscal year to March 31st, 1898, is 2,428 pounds. The increase of coal consumption is doubtless largely due to the heavy consumption of water for construction purposes and to the waste of water resulting from the reservoir breaks.

CAPACITY OF FLOW LINE.

The late piezometric measurements in connection with the slip test of the Kaw Point pumping engine afford an excellent basis of determining the discharging capacity of the 30-inch and 36-inch flow line. This test shows the discharging capacity of the 36-inch pipe to be about 61 per cent and that of the 30-inch pipe to be about 80 per cent of that of new pipe of the same size. This reduced discharging capacity is largely due to the resistance offered by corrosion and by deposits of mud on the inside of the pipe. The reason that the 36-inch pipe offers a proportionately greater resistance to flow than does the 30-inch pipe, is accounted for by the fact that the higher velocity of flow in the 30-inch pipe has a greater scouring effect and thereby receives less deposits than does the 36-inch pipe. During the summer months, however, when the daily consumption runs high, the conditions of flow in both pipe lines may more nearly correspond. Should the 36-inch pipe not scour out by natural flow during the summer, then some method of cleaning may eventually have to be devised.

It is well understood that the pipes composing the flow line are of unusually light weight for pressure pipes, therefore they should be subjected to heavy pressure with caution. The delivery of water through the flow line to supply the summer consumption will probably not exceed that of the past year, because the Metropolitan Water Company has provided its own supply of water; consequently there is little danger of the flow line becoming overstrained during the year '98. But when it is remembered that the pumping engines at Quindaro must lift water from 67 to 89 feet with the flow line in its present interior condition in order to insure a daily delivery of 13 to 15 million gallons of water, and that the maximum daily summer consumption is apparently approximating these amounts, it is clear that the flow line without reinforcement will soon be operated under a pressure which may reach the danger line for this light cast iron pipe.

The direct measurements which can now be made of the discharge of the flow line, and the facilities now offered for keeping indicator records of the Quindaro pumping engine, afford an opportunity of collecting data during the coming summer which are necessary as a guide in computing the probable time, the cost

and the character of any improvements which may be needed for the future improvement and reinforcement of the flow line and the low service pumping station.

TURKEY CREEK STATION.

The nominal capacity of the pumping engines at this station is 31 million gallons per day. The average coal consumption from April 20th to the end of December '97, was 70,558 pounds per day, and the average daily water consumption, based upon the apparent pump displacement, was 10,387,968 gallons.

The Barr pumping engine entered commission December 4th, '97, but was not in constant service during the month. For the purpose of comparing the relative economy of the Barr and Gaskill engines, the work of the three months, January, February and March, may be divided into two periods. The first period covers the interval when the Barr engine was working and the large Gaskill was idle. The second period covers the interval when the large Gaskill was working and the Barr engine was idle. The comparison is a fair one, as the average daily water consumption for these three months is practically uniform. For the first period, the average daily consumption of coal was 48,642 pounds, and the average daily displacement of the Barr pumps was 6,060,195 gallons, and of the other pumps working with the Barr pumps 2,235,616 gallons, or a total of 8,295,811 gallons per day. For the second period the average daily coal consumption at the station was 72,440 pounds and the apparent daily displacement of the Gaskill pumps was 5,363,530 gallons, and of the other pumps 4,484,914 gallons, or a total apparent displacement of 9,848,444 gallons per day. Therefore, during the second interval when the Barr engine was idle, the increase of daily coal consumption was 23,778 pounds, and of the apparent pump displacement 1,552,633 gallons. This comparison clearly shows that the Barr engine and its boiler equipment are coal savers. The saving reduced to dollars, with coal worth \$1.25 per ton, amounts to \$5,424 per year, or to the interest at 10½ per cent on a capitalization of \$51,657; the 10½ per cent embracing 4½ per cent for interest on investment, 3 per cent for sinking fund, 2 per cent for renewals and repairs, and 1 per cent for insurance.

The daily increase of apparent pump displacement of 1,552,633 gallons when the large Gaskill engine is working, can

be accounted for largely through pump slip. An inspection of the pumps of this engine shows that the loss of this character is heavy, and with due allowance for slip in the pumps of the engine which work with the Gaskill, amounts to about 1,200,000 gallons per day. That is to say, this amount of water is elevated to a height corresponding to the daily working pressure, but escapes the delivery pipe in leaks through the valves and by the plungers of the pumps. The continued presence of these defects in the pumps of this engine entails an annual loss of about \$2,890 worth of coal. This annual cost represents nearly 25 per cent on \$9,154, which is the amount it is proposed to expend for new steel water ends. It is therefore urgent from a financial as well as a mechanical standpoint, that the shattered pumps of this engine be repaired at an early day. The difference, \$3,084, between \$5,424, the estimated annual loss in coal consumption when the Barr engine is idle, and \$2,390, the value of the coal consumed in useless work by the large Gaskill engine, represents the annual loss resulting from the slip of the smaller engines and the use of a less efficient plant than is the new engine and its steam plant.

Kansas City is now and must remain dependent for a continuity of its water service upon pumping machinery working under a heavy pressure. Therefore it is especially necessary that the Turkey Creek Pumping Station be equipped gradually with high grade pumping machinery; that all machinery be kept in a high state of efficiency and exempt from such losses as pump slip to the greatest possible extent, in order to properly serve the interests of economy and to afford a prompt and efficient service. But until the Gaskill pump shall have been repaired, the station possesses insufficient reserve machinery to warrant the dismantling of any of the smaller machines for the purpose of thorough repairs.

RESERVOIRS AND STANDPIPES.

The topography of the city site does not admit of the extensive use of distributing reservoirs. In fact, the West and East bottoms, and similarly located territory, are about the only sections of the city which can be supplied from such reservoirs. The Holly Street Reservoir will doubtless answer indefinitely all the requirements of a service of this general character, with the

possible addition of a small reservoir in the northeastern portion of the city. The local conditions pre-eminently require any large storage of water to be made in low level basins at the low service station. With these basins substantially constructed, with a secure connection with the Missouri River, with an ample flow line capacity, and with a reserve engine capacity at the pumping stations, there need never be any scarcity of water.

. Standpipes have been mentioned as a desirable acquisition to the system of water works, but the occasion has not yet arisen to regard standpipes in a favorable light. Expenditures directed to the perfection of the distributing system of pipes, and in equipping the pumping stations with a more efficient plant, will afford much more profitable and satisfactory returns.

DISTRIBUTION SYSTEM.

The site of the city embraces large tracts of low level and high level territory, having a difference of elevation of over 200 feet. The intermediate territory is more or less undulating. In order to supply the high level territory with water for ordinary or domestic service, the pumping machinery is constantly under a pressure equivalent to the elevation of water 310 feet high, except in response to a fire alarm, when the pressure becomes equivalent to a head of water about 420 feet high.

It is altogether unnecessary that the same extremes of pressure should prevail over the low level districts, because much lower pressures will there answer all the legitimate demands of service. That is to say, if pressures equivalent to an elevation of water from 186 feet to 300 feet in emergencies serve efficiently, as they will, the low level territory, it is altogether unnecessary and unprofitable to consume coal and machinery to elevate the water needed for the supply of the low level territory an additional 100 feet, or to the elevation of the supply of the high level territory. Obviously, therefore, these territories should receive their supply of water as independent districts.

The East and West bottoms and other low level ground may be classed as a low level district, and should possess a system of distributing pipes and pumping machinery independent of those intended for the high level territory, except for a suitable arrangement of pipe connections and valves for turning the pressure of the high level territory upon the low level district in

emergencies. This method is now pursued in supplying the West Bottoms through the Holly Street Reservoir so long as the water delivered into the reservoir is not diverted through a partially throttled valve from the main supplying the high level territory. In that event, all water is practically elevated to the highest territory of the city, and distributed to the low level territory through the distributing reservoir acting essentially as a pressure-reducing valve. It is not clear, however, that all the available territory is yet embraced in the low level district as now supplied. An extension of the plan may involve the eventual construction of a second small distributing reservoir in the northeastern part of the city on the high ground overlooking the East Bottoms and continuous territory, and should certainly involve the setting apart of one or more engines for the exclusive service of this district.

The high level territory may also be districted into a North and South district. It becomes evident upon a study of the distributing system that a main feeder is needed in the northern section of the city. Likewise a similar main will eventually be needed in the southern portion of the city. Both mains should run eastward, and so far as practicable, along the high ground in their respective districts. The distributing pipes will extend from one district into the other without district limitations. Thus a heavy local draught in one district will receive support from the other through numerous channels. These several district mains connected by numerous distributing pipes will afford numerous routes by which water can reach any particular locality, and thus will reduce the hazard of a failure of the water supply in any section of the city, will improve the fire service and will minimize the momentary fluctuation of load upon the pumps resulting from a temporarily heavy local draught of water by distributing the effect over a wide range of distribution. These main feeders, especially the one for the northern portion of the city, are needed both for the proper reinforcement of the distributing pipes and for a safer and more reliable fire service under all circumstances. At the present time, the 30-inch force main is so throttled as to be unable to discharge more than two-thirds of its full capacity. In this throttled condition it is in a measure excessively strained. It can be relieved, and the distributing system, which is more or less in need of reinforcement,

improved by connecting with it additional feeders. Should this 80-inch main become disabled, a serious impairment of fire service will ensue pending the work of repairs. This danger can be averted only through the use of an independent main extending from the pumping station to the main feeders of the distributing system. The introduction into the distributing system of additional feeders will admit of water being delivered to the high ground with comparatively small pipe resistance losses and thus tend to reduce the present range of pressure between domestic and fire service. A north district feeder should be constructed without delay. The construction of the south district feeder is a matter rather for future than for present consideration.

The water department does not possess at the present time adequate data with which to formulate a definite and comprehensive plan of properly and economically reinforcing and extending the distributing system of pipes. These data can only be collected and compiled during the summer season, at such hours of the day when the consumption approaches a maximum. Once having them, the routes and size of the requisite feed pipes can be determined with reasonable accuracy for both domestic and fire service.

Kansas City must always remain dependent upon direct pressure service. But because of this fact it does not follow that steamer fire service becomes a matter of secondary importance. A more extended use of steamers than now prevails must necessarily follow the expansion of the city, particularly in the business district.

The fine silt which prevails to a greater or less extent in our water supply, deposits more or less of a thin coating upon the inside of the pipe, and seriously impairs the discharging capacity of small pipes. It is urged, therefore, that nothing smaller than 6-inch pipes be laid where fire hydrants are to be supplied. Also that a more liberal supply of hydrants be provided, both for steamer and direct pressure fire service.

It is urged that in the purchase of pipe for extensions and reinforcements, the pipes be classified by weight in proportion to the pressure they may be called upon to sustain as a part of the distributing system; the heavier pipe of any given size to be placed on the low ground. A standard specification covering the essential requirements of each class (probably two classes in

most instances) may aid in the purchase of pipe and special castings and in the acquirement of a longer lived and more secure distributing system than will be the case if what is known as standard-weight pipe is used indiscriminately. However, no pipe less than standard weight should be used.

In conclusion I beg to offer the following recommendations:

1. That the repairs to the Quindaro settling basins be continued until the basins are safe.

2. That data be collected during the summer upon which to base an estimate of the time which the present flow line facilities will suffice and of the best method to pursue in the work of increasing these facilities when needed, and an estimate of the cost thereof.

3. That the pumping machinery at Turkey Creek Station be placed in a thoroughly efficient condition, and that as the old pumping engines become too small or unserviceable, they be gradually replaced by high grade engines which are suited to the peculiarities of the water service.

4. That the requisite data be collected during the summer for the purpose of formulating a plan of economically and successfully reinforcing and extending the distributing system of pipes. Also that standard specifications be prepared for cast iron water pipes and special castings.

The early consummation of the general plan which you have outlined and are now pursuing in an effort to make substantial repairs, to liberally reinforce the distributing system and to gradually substitute high grade pumping machinery for that which has outlived its usefulness is one which in my judgment should receive substantial support and united indorsement.

I have the honor to be,

Very respectfully,

WYNKOOP KIERSTED,

Chief Engineer.

SYNOPSIS.

	Gallons.
Daily average consumption	9,960,000
Daily consumption per capita (about)	60
Maximum pumpage December 21, '97	14,070,804
Minimum pumpage May 15, '97	6,195,767

Total number meters in use	3,688
Total number elevator indicators in use	60
Total number services added during year	1,141
Total number of taps	14,541
Number of feet of pipe laid during year	34,597
Total number miles of pipe in use Apr. 19, '98..	158 8050.5280
Total number hydrants	1,558

Cost of laying pipe (including valves, specials and hydrants)	\$ 21,613.13
Operating expenses	120,492.17
Operating expenses Assessor and Col.	11,676.08
Betterment expenses	101,470.96

RECEIPTS AND EXPENDITURES, FISCAL YEAR, 1897.

Balance with Treasurer	\$127,064.62
Total receipts	427,115.21
Assessor and Collector	\$ 11,676.08
Operating expenses	120,492.17
Betterment of plant	101,470.96
Interest on bonds	138,847.50
Sinking fund	60,000.00
Balance with Treasurer	121,693.12
	<hr/>
	\$554,179.83
	<hr/>
	\$554,179.83

PAY ROLLS AND VOUCHERS.

Department.	Pay Rolls.	Vouchers.	Total.
Supt., Engineer and Office	\$ 7,479.17	\$ 546.18	\$ 8,025.35
Street	10,009.31	4,199.42	14,208.73
Inspection	10,517.01	1,888.61	12,405.62
Meter	9,557.13	5,211.74	14,768.87
Turkey Creek	21,572.43	19,797.12	41,369.55
Quindaro	12,504.36	12,574.70	25,079.06
Distributing plant	8,702.98	32,754.04	41,457.02
Betterment, Turkey Creek ..	3,745.93	28,849.64	32,595.57
Betterment, Quindaro	17,682.13	9,736.24	27,418.37
Insurance, taxes, etc		4,634.99	4,634.99
	<hr/>	<hr/>	<hr/>
	\$101,770.45	\$120,192.68	\$221,963.13

OPERATING EXPENSES FISCAL YEAR 1897.

Month.	Supl., Eng. and Office.	Street.	Inspection.	Meter.	Turkey Creek.	Quindaro.	Miscellane- ous.	Betterment Ordinance.	P. R.	Vouchers.	Totals.
Apr. 1st to 8th	\$220 17	\$224 47	\$200 41	\$282 00	\$101 90	\$202 91		\$105 62	\$2245 48	\$10406 10	\$12740 18
May	6 60	12 14	1 50	105 06	501 86	544 81	\$2 60	\$414 46			
June	625 00	161 84	706 71	760 25	1541 98	1202 40	77 60	228 07	6780 46	18406 82	20206 78
July.	137 90	200 58	71 30	645 06	1365 44	982 72		571 51	9165 28	12822 56	21687 78
August	625 00	920 29	757 95	734 50	1742 88	168 76	64 24	906 88	8589 90	4949 58	13589 43
September	33 11	178 95	205 16	529 24	1605 21	1801 48			9791 49	6743 65	16585 14
October.	625 00	206 17	763 85	763 25	2435 00	1078 40	128 80	564 98	7806 02	8407 44	15713 46
November	24 58	261 31	133 72	262 50	1419 76	785 74		1936 15	15505 49	25209 95	40715 44
December	625 00	952 57	968 72	739 25	1802 17	1148 07	107 50	915 09	7348 01	7608 74	14946 80
January	19 21	313 87	228 44	588 09	2528 67	1750 63		945 20	7348 01	9645 87	16938 88
February	625 00	626 30	874 19	797 50	1974 59	1265 34	154 00	1015 61	6316 74	3162 19	9478 93
March	15 95	282 97	170 26	500 19	1766 08	931 86		2778 95	7411 48	4424 07	11838 55
Apr 1st to 14th	625 00	1049 21	944 28	706 75	1785 59	952 87	21 00	2428 70	4082 45	2565 98	6648 57
Totals	\$425 25	\$1126 73	\$1246 62	\$14704 87	\$41899 65	\$25479 06	\$4684 90	\$34065 59			\$221963 18

COMPARATIVE TABLE OF EXPENSE FOR YEARS 1896-7.

Department.	1896.	1897.	Increase.
Supt., Engineer and Office ..	\$ 8,915.17	\$ 8,025.85	
Street ..	13,857.55	14,208.73	\$ 351.18
Inspection ..	8,911.43	12,405.62	3,494.19
Meter ..	13,153.79	14,768.87	1,615.08
Turkey Creek ..	31,937.50	41,369.55	9,432.05
Quindaro ..	18,117.57	25,079.06	6,961.49
Distributing plant ..	21,897.55	41,457.02	19,559.47
Betterment, Turkey Creek....	12,517.09	32,595.57	20,078.48
Betterment, Quindaro ..	8,505.70	27,418.37	23,912.67
Insurance, taxes, etc ..	4,391.08	4,634.99	243.91

The increase of \$351.18 in Street Department for 1897 over 1896 is due to the small increase in the force of this department.

The Inspection Department shows an increase of \$3,494.19, which is due to the fact that the business has increased to such an extent that an additional inspector has been necessary; also that four laborers have been regularly employed during the past year. There have been 1,141 taps made during the year 1897 as against 524 taps for 1896.

An increase of \$1,615.08 shows in the Meter Department for 1897; which is due to the fact that there has been an additional man added to the meter force, and general increase in salaries of force, owing to the fact that the force has been put on regular salary instead of day pay, as was the case during preceding year.

An increase of \$9,432.05 for 1897 over preceding year shows for Turkey Creek expense, which is accounted for by the fact that the force at this station has been materially increased, three shifts being worked instead of two, as was formerly the case. The price of coal being advanced 3 cents per ton, also added to the increase; also pumping being greater than previous year. The chief item of this increase, however, was caused by the increase in force.

The increase of \$6,961.49 for Quindaro is explained by reason of additional help, account of changing from two shifts to three, the heavy cost of repairs to station, account extensive repairs being made on basins, increased pumpings, etc.

Office of Street Division of Water Department.)
 S. W. Corner Second and Main Sts.,)
 KANSAS CITY, Mo., April 18, 1898.)

D. W. Longwell, Superintendent.

This report of work done in this division of water department during the year commencing April 19, 1897, and ending this date, respectfully submits that we have laid 34,938 feet of pipe, representing 34,084 feet of mains and 849 feet of side lines, have set 84 hydrants and 70 valves. These mains have been laid at a cost in labor of 15 per cent less than usual in any city in this country, and have been laid with so much care that no imperfections have been reported.

On account of change of grades in streets, we have lowered 5,270 feet of pipe without interruption of use of water by consumers. The cost of this work has been somewhat increased on account of excavation, in most places being made in rock. Also the change of curbs has necessitated the moving of 57 hydrants.

We have cared for 157 miles of pipe, 1,652 hydrants, and 1,000 valves. This includes the Westport addition of 13 miles of pipe, 100 hydrants and 60 valves. This work has been accomplished, and there has not been a single complaint of failure in any respect.

On account of the unrestricted use of hydrants by the city street department, the care of these has called for extraordinary vigilance, but the Fire Department has never had occasion to use a hydrant in service that was not in perfect condition. While we have had numerous lead leaks and some breaks during the winter, no damage has resulted therefrom.

Our valve system is imperfect and has received less improvement from the department than any other branch of the service. The recommendation is made again that the many valves heretofore reported out of order be replaced by new ones, and many be added to the old part of the system. The details of this and all other work are submitted in a tabulated statement accompanying this report.

Respectfully submitted,

JAMES S. CANNON,

Foreman.

Report of the Work Done by the Street Division of Water Works Department from April 19, 1897, to April 18, 1898.

J. S. CANNON, Foreman.

Months.	Hydrants.				Valves.			Cubic Feet.		Mains Laid.		Pipe Lowered.		Loads Hauled.		Night Calls from Inspector.	Breaks in Mains.
	Miscellaneous Work on Hydrants.				Work on Valves.			Yds. Le'ks		New Pipe.		Miscellaneous.		Hauled.			
	Repacked and Caulked.	Moved and Reset.	Tested and Oiled.	Repaired.	New.	Inspected.	Repaired.	Excavated for Pipe.	Excavated Other than Pipe.	Repaired.	Less than 4 in.	4 in.	6 in.	10 in.	Pipe.			Dirt.
April 20, 1897	2	1		3	2	1		6840	24			672	11	8	12		
May.	11	6	60	5	3	20	1	19100	34	1		612	17	25	20		
June.	13	1	6	6	6	30	3	44570	28	3		3237	42	19	32		
July.	14	8	68	4	4	210	2	32850	16	2		1890	32	38	36		
August	15	5	136	5	12	124	2	35300	28	2	190	3624	12	21	20		
September	137	4	35	9	9	160	1	20780	28	2		616	38	29	14	5	
October	141	1	160	32	8	217		50280	53	21		4290	20	43	26		
November.	100	14	136	31	1	211	2	9700	56	21		288	28	44	34		
December.	18		62	21	1	128		620	84	2		48	26	19	47		
January.	27			25	6	164	4	75300	16	2		3636	34	21	18		
February	75	5	19	12	6		2	10620	46	11		444	12	43	18		
March	102	9	49	5	7	152	2	23120	24	6		84	40	12	18		
April 18, 1898	40		30	6	5			2040		3		660	14	87	13		
	645	57	761	163	70	37	1176	126	467	76	190	5830	963	392	328	5	

Inventory of Material Used and Stock on Hand 1898, by Street Department.

CAST IRON PIPE.

Size	Received.	Laid.	Sold.	Used.		On Hand.	
				Resetting Hydrants.	At T. C. P. H.	Apr. 19, 1897.	Apr. 18, 1898.
	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lin. Ft.
2 In						180	180
4 In	2400	6196	318	72	218	6176	2042
6 In	27000	24521	276			9552	11701
8 In	7052		24			744	6372
10 In	1158	1050				60	192
12 In						60	60
15 In					36	72	36
16 In	12					60	72
20 In	61					36	120
24 In						18	18
30 In					96	132	36

VALVES AND HYDRANTS AND SPECIALS ON HAND APRIL 18, 1898.

Article.	Size.	No.	Article.	Size.	No.
Sleeves and Rings	4 In	9	Cast Iron Anchors	4 In.	134
Sleeves and Rings	6 In.	20	Cast Iron Anchors	6 In	43
Sleeves and Rings	8 In	12	Cast Iron Anchors	8 In.	16
Sleeves and Rings	10 In	2	Cast Iron Crosses	4 In.	10
Sleeves and Rings	12 In	5	Cast Iron Crosses	6 In.	27
Sleeves and Rings	15 In	2	Cast Iron Crosses	8 In.	18
Sleeves and Rings	16 In	5	Cast Iron Crosses	10 In.	6
Sleeves and Rings	20 In	1	Cast Iron Crosses	12 In	1
Sleeves and Rings	24 In	6	Cast Iron Crosses	20 In	2
Sleeves and Rings	30 In	2	Cast Iron Crosses	24 In.	1
Sleeves and Rings	36 In	2	Cast Iron Crosses	15 In	1
Cast Iron Bends	4 In	12	Cast Iron Crosses	16 In	1
Cast Iron Bends	6 In	94	Ludlow Hydrants	4 In	19
Cast Iron Bends	8 In	23	Ludlow Hydrants	6 In	2
Cast Iron Bends	10 In	6	Gaskell Hydrants	6 In	2
Cast Iron Bends	16 In	2	Coxey Hydrants	4 In	6
Cast Iron Bends	20 In	2	Ludlow Valves	4 In	4
Cast Iron Bends	30 In	2	Ludlow Valves	6 In	6
Cast Iron Bends	15 In	5	Ludlow Valves	8 In	3
Cast Iron Reducers	6 In	28	Ludlow Valves	10 In.	1
Cast Iron Reducers	8 In	10	Ludlow Valves	12 In	1
Cast Iron Reducers	10 In	1	Chapman Valves	6 In	2
Cast Iron Reducers	12 In	1	Smith Valves	6 In	12
Cast Iron Reducers	16 In	1	Cast Iron Tees	4 In	20
Cast Iron Reducers	20 In	1	Cast Iron Tees	6 In	36
Cast Iron Plugs	4 In	51	Cast Iron Tees	8 In	8
Cast Iron Plugs	6 In	61	Cast Iron Tees	10 In	1
Cast Iron Plugs	8 In	27	Cast Iron Tees	12 In	2
Cast Iron Plugs	10 In	6	Cast Iron Tees	20 In	9
Valve Covers		7	Cast Iron Tees	24 In	1
			Cast Iron Tees	30 In	2

HYDRANTS.

VALVES.

Received		Set.		On Hand		Received		Set.		On Hand	
				April 19, 1897	April 18, 1898					April 19, 1897	April 18, 1898
27		84		16	20	4		50		19	4

INVENTORY OF MISCELLANEOUS STOCK ON HAND APRIL 18, 1898.

Syphons 2; Block and Tackle Sets, 1; Boreholes, 2; Saws, 1; Axes, 1; Shovels, 1; Spades, 1; Picks, 1; Crowbars, 1; Hydraulic and Valve Repair outfit, 1; Sets Caulkers, 1; Cutting and Grinding Tools, 1; Wrenches, 1; Hammers, 1; Packing 30 pounds; Lead 2,000 pounds

NEW HYDRANTS SET.

W. S. Grand ave 380 ft south Twenty-third	8	Inch.
N. W. Tenth and Euclid ave.	8	"
S. W. Seventeenth and Askew ave.....	8	"
S. E. Twenty-third and Main	8	"
E. S. Euclid between Independence and Seventh.....	4	"
S. W. Seventh and Gladstone.....	4	"
S. W. Eighth and Gladstone.	4	"
N. E. Tenth and Park.....	4	"
N. E. Eleventh and Park	4	"
S. W. Thirty-first and Garfield.....	4	"
W. S. Garfield between 30th and 31st.....	4	"
N. E. Thirtieth and Flora.....	4	"
W. S. Flora between 30th and 31st.....	4	"
S. W. Lydia between 17th and 18th	4	"
W. S. Baltimore between 29th and 30th	4	"
N. W. Thirtieth and Baltimore.....	4	"
W. S. Baltimore between 30th and 31st.	4	"
N. W. Baltimore and 31st.	4	"
S. W. Harrison and Missouri ave.....	4	"
N. W. Harrison and Pacific.....	4	"
S. E. Baltimore and 29th	4	"
West Oak between 30th and 31st	4	"
W. S. Forest between 29th and 30th.....	4	"
N. W. Forest and 30th	4	"
W. S. Forest between 30th and 31st.....	4	"
N. W. Forest and 31st.	4	"
N. W. Twenty-third and Woodland.....	4	"
S. E. Fourteenth and College ave	4	"
S. W. Twenty-ninth and Harrison..	4	"
S. W. Twenty-fifth and Park ave.....	4	"
N. W. Twenty-second and Montgall ave.....	4	"
N. W. Thirteenth and Highland ave	4	"
S. S. Sixth between Prospect and Chestnut.....	4	"
S. W. Chestnut and Sixth	4	"
S. S. Sixth between Chestnut and Bellefontaine.....	4	"
S. E. Bellefontaine and Sixth	4	"
S. W. Sixth and Walrond	4	"
N. W. Seventeenth and Michigan ave	4	"
W. S. Michigan between 17th and 18th.....	4	"
S. S. Morrell between Walrond and Indiana	4	"
S. W. Morrell and Indiana.....	4	"
S. S. Morrell between Indiana and Bales	4	"
S. W. Morrell and Bales	4	"
S. W. Twenty-eighth and Bellevue ave	4	"
W. S. Bellevue between 28th and 29th.....	4	"
W. S. McGee between 30th and 31st.	4	"
S. S. Missouri ave. between Maple and Garfield	4	"
S. E. Twenty-third and Michigan	4	"
S. W. Thirteenth and Bales	4	"
N. W. Fourteenth and Bales.	4	"
W. S. Chestnut 300 ft. N. of Independence ave	4	"
W. S. Chestnut 610 ft. N. of Independence ave	4	"
S. W. Thirtieth Nelson Place.....	4	"
W. S. Nelson Place between 30th and 31st.....	4	"

Total forwarded 54

NEW HYDRANTS SET.—Continued.

Total forwarded	54	
N. W. Thirty-first and Nelson Place...	4	Inch.
N. W. Dunham and Indiana...	4	"
S. W. Twentieth and Indiana.....	4	"
N. W. Matthew and ".....	4	"
S. W. Twenty-first and ".....	4	"
S. W. Nineteenth and ".....	4	"
N. W. Howard and ".....	4	"
S. W. Twenty-second and ".....	4	"
N. W. Twenty-third and ".....	4	"
N. W. Twenty-fourth and ".....	4	"
W. S. Indiana 207 ft. N. of 25th.....	4	"
S. E. Janson Place 150 ft. S. 36th	4	"
W. S. " " 325 S. 36th	4	"
S. E. " " opp. 38th.....	4	"
E. S. " " 900 S. of 36th.....	4	"
W. S. Summit between 20th and 21st.....	4	"
W. S. Michigan between 22nd and 23d.....	4	"
W. S. Harrison between 29th and 30th.....	4	"
S. W. Twentieth and Mercer.....	4	"
W. S. Penn opp. High	4	"
N. E. Fifteenth and Cherry	4	"
S. W. Thirtieth and Harrison	4	"
W. S. Harrison between 30th and 31st	4	"
S. W. Independence Bvd. and Euclid	4	"
W. S. West Prospect between 23d and 24th.....	4	"
N. W. Twentieth and Central	6	"
Total	80	

MAINS LAID IN 1898.

Ord.	Location	Length of Line.		Total No. of Valves	Size of Valves.			Total Valves	Fire Hydrants		Coal Laid Line Laid	Average Cost per Ft.
		1 1/2 in.	4 in.		1 1/2 in.	4 in.	6 in.		4 in.	6 in.		
8469	Pima ave. Park to 14th											
8470	14th to 15th	544		312							312	18
8471	15th to 16th			782							782	25
8472	16th to 17th			782							782	25
8473	17th to 18th	318		372							372	18
8474	18th to 19th	380		480							480	18
8475	19th to 20th			480							480	18
8476	20th to 21st	380		480							480	18
8477	21st to 22nd	380		480							480	18
8478	22nd to 23rd	380		480							480	18
8479	23rd to 24th	380		480							480	18
8480	24th to 25th	380		480							480	18
8481	25th to 26th	380		480							480	18
8482	26th to 27th	380		480							480	18
8483	27th to 28th	380		480							480	18
8484	28th to 29th	380		480							480	18
8485	29th to 30th	380		480							480	18
8486	30th to 31st	380		480							480	18
8487	31st to 32nd	380		480							480	18
8488	32nd to 33rd	380		480							480	18
8489	33rd to 34th	380		480							480	18
8490	34th to 35th	380		480							480	18
8491	35th to 36th	380		480							480	18
8492	36th to 37th	380		480							480	18
8493	37th to 38th	380		480							480	18
8494	38th to 39th	380		480							480	18
8495	39th to 40th	380		480							480	18
8496	40th to 41st	380		480							480	18
8497	41st to 42nd	380		480							480	18
8498	42nd to 43rd	380		480							480	18
8499	43rd to 44th	380		480							480	18
8500	44th to 45th	380		480							480	18
8501	45th to 46th	380		480							480	18
8502	46th to 47th	380		480							480	18
8503	47th to 48th	380		480							480	18
8504	48th to 49th	380		480							480	18
8505	49th to 50th	380		480							480	18
8506	50th to 51st	380		480							480	18
8507	51st to 52nd	380		480							480	18
8508	52nd to 53rd	380		480							480	18
8509	53rd to 54th	380		480							480	18
8510	54th to 55th	380		480							480	18
8511	55th to 56th	380		480							480	18
8512	56th to 57th	380		480							480	18
8513	57th to 58th	380		480							480	18
8514	58th to 59th	380		480							480	18
8515	59th to 60th	380		480							480	18
8516	60th to 61st	380		480							480	18
8517	61st to 62nd	380		480							480	18
8518	62nd to 63rd	380		480							480	18
8519	63rd to 64th	380		480							480	18
8520	64th to 65th	380		480							480	18
8521	65th to 66th	380		480							480	18
8522	66th to 67th	380		480							480	18
8523	67th to 68th	380		480							480	18
8524	68th to 69th	380		480							480	18
8525	69th to 70th	380		480							480	18
8526	70th to 71st	380		480							480	18
8527	71st to 72nd	380		480							480	18
8528	72nd to 73rd	380		480							480	18
8529	73rd to 74th	380		480							480	18
8530	74th to 75th	380		480							480	18
8531	75th to 76th	380		480							480	18
8532	76th to 77th	380		480							480	18
8533	77th to 78th	380		480							480	18
8534	78th to 79th	380		480							480	18
8535	79th to 80th	380		480							480	18
8536	80th to 81st	380		480							480	18
8537	81st to 82nd	380		480							480	18
8538	82nd to 83rd	380		480							480	18
8539	83rd to 84th	380		480							480	18
8540	84th to 85th	380		480							480	18
8541	85th to 86th	380		480							480	18
8542	86th to 87th	380		480							480	18
8543	87th to 88th	380		480							480	18
8544	88th to 89th	380		480							480	18
8545	89th to 90th	380		480							480	18
8546	90th to 91st	380		480							480	18
8547	91st to 92nd	380		480							480	18
8548	92nd to 93rd	380		480							480	18
8549	93rd to 94th	380		480							480	18
8550	94th to 95th	380		480							480	18
8551	95th to 96th	380		480							480	18
8552	96th to 97th	380		480							480	18
8553	97th to 98th	380		480							480	18
8554	98th to 99th	380		480							480	18
8555	99th to 100th	380		480							480	18
8556	100th to 101st	380		480							480	18
8557	101st to 102nd	380		480							480	18
8558	102nd to 103rd	380		480							480	18
8559	103rd to 104th	380		480							480	18
8560	104th to 105th	380		480							480	18
8561	105th to 106th	380		480							480	18
8562	106th to 107th	380		480							480	18
8563	107th to 108th	380		480							480	18
8564	108th to 109th	380		480							480	18
8565	109th to 110th	380		480							480	18
8566	110th to 111th	380		480							480	18
8567	111th to 112th	380		480							480	18
8568	112th to 113th	380		480							480	18
8569	113th to 114th	380		480							480	18
8570	114th to 115th	380		480							480	18
8571	115th to 116th	380		480							480	18
8572	116th to 117th	380		480							480	18
8573	117th to 118th	380		480							480	18
8574	118th to 119th	380		480							480	18
8575	119th to 120th	380		480							480	18
8576	120th to 121st	380		480							480	18
8577	121st to 122nd	380		480							480	18
8578	122nd to 123rd	380		480							480	18
8579	123rd to 124th	380		480							480	18
8580	124th to 125th	380		480							480	18
8581	125th to 126th	380		480							480	18
8582	126th to 127th	380		480							480	18
8583	127th to 128th	380		480							480	18
8584	128th to 129th	380		480							480	18
8585	129th to 130th	380		480							480	18
8586	130th to 131st	380		480							480	18
8587	131st to 132nd	380		480							480	18
8588	132nd to 133rd	380		480							480	18
8589	133rd to 134th	380		480							480	18
8590	134th to 135th	380		480							480	18
8591	135th to 136th	380		480							480	18
8592	136th to 137th	380		480							480	18
8593	137th to 138th	380		480							480	18
8594	138th to 139th	380		480							480	18
8595	139th to 140th	380		480							480	18
8596	140th to 141st	380		480							480	18
8597	141st to 142nd	380		480							480	18
8598	142nd to 143rd	380		480							480	18
8599	143rd to 144th	380		480							480	18
8600	144th to 145th	380		480							480	18
8601	145th to 146th	380		480							480	18
8602	146th to 147th	380		480							480	18
8603	147th to 148th	380		480							480	18
8604	148th to 149th	380		480							480	18
8605	149th to 150th	380		480					</			

MAINS LAID BY WESTPORT 1897.

Location.	Size of pipe. Length of line				Total No. of feet.	Valves No. and size.				Total No. valves
	10 in	8 in	6 in	4 in		10 in	8 in	6 in	4 in	
Well 31st to 30th.	2962				2962	1				1
30th Darrough to Genesee	330				330					
Westport ave. Penn to Chestnut		1715			1715		2			2
Roanoke, 35th to 39th		470			470		1			1
35th Main to Troost		7510			7510		5			5
Baltimore ave., 30th to 39th.			1945		1945			1		1
32nd Holmes to Campbell			760		760					
33d Penn to Broadway			635		635			1		1
43d Main to Walnut			340		340					
Walnut 41st to 43d			870		870			1		1
44th Oak to Cherry			650		650			1		1
Central 35th to Westport ave.			1725		1725			1		1
Penn Westport to Lawrence			670		670			1		1
44d Chestnut to Central			1610		1610			1		1
Westport ave. Chestnut to 43d			510		510			1		1
Chestnut, 39th to 43d			2800		2800	2		1		3
Penn. Hanover to 35th			1220		1220					
Madison 37th to 38th.			1120		1120			1		1
Washington, 38th to Hanover.			1770		1770					
Central 43d to a point south			950		950			1		1
Main, 40th to 45th.			3135		3135			2		2
45th Main north to Main south.			200		200			1		1
35th Penn to Roanoke.			2620		2620			2		2
Oak 40th to 44th			2661		2661			2		2
Holmes, 36th to 37th.			615		615			1		1
43d Oak to Cherry			632		632			1		1
Woodworth ave. Main to Oak			1312		1312			1		1
40th Main to Oak			1335		1335			1		1
43d Main to McGee.			1165		1165			1		1
Penn. 31st to a point south 35th			2582		2582			2		2
McGee, 31st to 33d.			1361		1361			1		1
Oak 31st to 33th.			1340		1340			1		1
Cherry 31st to 33d			1612		1612			1		1
Campbell 31st to 32nd			615		615			1		1
Harrison, 31th to 35th.			756		756			2		2
Locust, 33d to a point north			320		320					
Holmes 31st to 33d			1612		1612			1		1
37th Warwick Bvd to McGee			335		335			1		1
Warwick Bvd., 35th to 43d			2096		2096			1		1
Campbell, 33d to 39th			1955		1955			2		2
39th Kenwood to Campbell			65		65			2		2
39th Grand ave. to McGee			2227		2227			1		1
McGee, 39th to 43d			2227		2227			2		2
Archibald, Chestnut to Elizabeth				1000	1000				1	1
Elizabeth, 40th to Westport ave.				1000	1000					
40th Elizabeth to Penn				1100	1100					
Lanwood, Main to McGee.				1000	1000			2		2
Spring Main to a point east				1000	1000				1	1
Totals.	3962	9720	4197	1510	10589	1	1	4	1	6

Hydrants and Location, Westport, 1897.

Bell, N. W. 32d st.....	6	Inch
S. E. 43d and Westport ave	6	"
S. E. Linwood and Grand.....	4	"
S. S. 34th, 1082 ft. E. of Main	6	"
S. W. 38th and Roanoke.....	6	"
N. W. 32d and Penn.....	6	"
N. W. 39th and Baltimore.....	4	"
S. W. 38th and Baltimore.....	4	"
S. W. 37th and Baltimore.....	4	"
S. W. 36th and Baltimore.....	4	"
S. W. Archibald and Elizabeth.....	4	"
S. S. 32d and Charlotte.....	4	"
S. W. 41st and Walnut.....	4	"
W. S. Walnut, bet. 41st and 43d.....	4	"
S. W. 43d and Walnut.....	4	"
S. W. 44th and Cherry.....	4	"
S. W. 44th and Locust.....	4	"
S. W. 38th and Central.....	4	"
N. W. 39th and Central.....	4	"
S. W. Myrtle and Central.....	4	"
N. E. Archibald and Penn.....	4	"
N. E. Penn and Lawrence.....	4	"
S. W. Central and 43d st.....	4	"
S. W. Washington and 43d st.....	4	"
S. E. Jefferson and 43d st.....	4	"
S. W. Westport and Mill.....	4	"
S. S. Westport, opposite Bryant.....	4	"
S. W. Westport and Elizabeth.....	4	"
S. W. Chestnut and Westport ave.....	4	"
N. W. Archibald and Chestnut.....	4	"
S. W. High and Chestnut.....	4	"
S. W. Pearl and Chestnut.....	4	"
S. W. 40th and Chestnut.....	4	"
N. W. Penn and 38th st.....	4	"
S. W. Penn and Randolph.....	4	"
S. W. Penn and Hanover.....	4	"
S. W. 37th and Madison.....	4	"
S. W. Randolph and Madison.....	4	"
N. E. 38th and Washington.....	4	"
S. W. Hanover and Washington.....	4	"
W. S. Central, 400 ft. S. of 44th st.....	4	"
N. W. 44th and Central.....	4	"
W. S. Main, opposite 45th st.....	4	"
W. S. Main, opposite 44th st.....	4	"
S. W. Main and 43d st.....	4	"
N. W. Main and 42d st.....	4	"
N. W. Main and 41st st.....	4	"
N. W. 33d and Cherry.....	6	"
W. S. Oak, 342 S. of 35th.....	6	"
W. S. Oak, 977 ft. S. 31st st.....	6	"
N. W. 32d and McGee st.....	6	"
S. W. McGee and Linwood.....	6	"
S. W. Bayard and McGee.....	6	"
S. E. 32d and Bell.....	6	"
S. W. Chestnut and Genesee.....	6	"
S. E. 33d and Penn.....	6	"
S. W. 34th and Penn.....	6	"

N. W. 35th and Penn	6 Inch
S. E. Spring and Main st	6 "
S. E. Spring and Lumis add...	4 "
S. S. 33d and Warwick	6 "
S. W. 33d and McGee.	6 "
S. E. 34th and Main.	6 "
S. W. 34th and Grand	6 "
S. E. Main and Woodworth	6 "
S. S. Woodworth 485 E. of Main.	6 "
S. S. Woodworth 915 E. of Main.	6 "
S. W. Woodworth and Oak.	6 "
S. W. 40th and Oak	6 "
W. S. Oak opp. 41st.	6 "
S. W. Oak and 43d	6 "
N. W. Oak and 44th	6 "
W. S. Elizabeth and 410 N. of Westport ave	4 "
W. S. Elizabeth and 125 S. of Pitt ave	4 "
S. W. 40th and Elizabeth	4 "
S. W. 35th and Harrison	6 "
N. E. 35th and Cherry	6 "
S. E. 35th and McGee	6 "
S. E. 35th and Warwick.	6 "
S. E. 35th and Walnut	6 "
E. S. Penn and High.	4 "
N. E. 38th and Furbo.	4 "
N. E. 38th and Bellevue.	4 "
N. E. 38th and Madison ave	4 "
N. E. 38th and Summit	4 "
S. W. 40th and Main	1 "
W. S. Cherry between 32nd and 33d	6 "
N. E. 32nd and Cherry	6 "
N. W. 32nd and Campbell.	6 "
N. W. 33d and Holmes	6 "
W. S. Holmet 328 ft. N. of 33d	6 "
S. W. 32nd and Holmes	6 "
W. S. Warwick between 39th and 40th.	6 "
N. W. Warwick and 40th.	6 "
N. W. Warwick and 39th.	6 "
N. W. 38th and Warwick	6 "
S. W. 37th and McGee	6 "
N. W. 37th and Warwick.	6 "
N. W. 36th and Warwick	6 "
S. E. 35th and Warwick.	6 "
S. W. 36th and Charlotte.	6 "
S. W. 35th and Holmes	6 "
S. W. 40th and McGee	6 "
N. W. 43d and McGee	6 "
S. W. 41st and McGee	6 "
N. W. 36th and Campbell	6 "
S. W. 35th and Campbell	6 "
N. W. 34th and Campbell	6 "
S. W. 33d and Campbell.	6 "

Total Number Hydrants

104

KANSAS CITY, Mo., April 19, 1898.

D. W. Longwell, Superintendent.

Below is a report of Inspection Department for the fiscal year ending April 18, 1898. It certainly shows that considerable has been accomplished during that period:

On, regular	4747
On, repaired	470
On, builders	338
On and off for elevator test	17
Off, moved	1407
Off, request	430
Off, violation	116
Off, torn down	1
Off, unpaid	1825
Off, burned	17
Off, leak	534
Off, builders finished	253
Examined by Building Inspector	2263
Shortages found by Building Inspector	63
Violations found by Building Inspector	218
Rerated	4663
See if O. K.	2538
See if off	1702
Trenches examined	2266
Small mains turned off	131
Statements taken	822
Boxes measured special	69
Boxes out of order	754
Notices to repair boxes	237
Keys captured	23
Services examined	632
Leaks found and notices given	2329
Blocks consumers notified before street is paved	147
Meter found out of order	1
By-pass valves examined	40
By-pass valves sealed	5
Fire protection valves examined	435
Fire protection valves sealed	64
Examination for correction of maps	36
Miscellaneous	5179
Sprinkling violations	43
Service permits issued	1555
Service permits examined	1921
Service permits rejected	238
Extension permits issued	2514
Extension permits examined	2836
Extension permits rejected	121
Taps made	1141
Fountains examined	899
Services repaired	173
Services disconnected	134
New fountains put in	2

Respectfully submitted,

WALTER R. WILSON,

Chief Inspector.

REPORT OF METER DEPARTMENT.

KANSAS CITY, Mo., April 18, 1898.

D. W. Longwell, Superintendent.

DEAR SIR:—Herewith I submit a report of this department for the fiscal year ending April 18, 1898. This, however, does not include clerical and much other miscellaneous work done which it is not practicable to catalogue.

No. of meters in stock at beginning of the year	48
No. of meters bought	219
No. of meters received from plumbers and consumers	164
No. of repaired meters put in stock	31
No. of meters set	468
No. of meters in stock	21
	<hr/>
	492
	<hr/>
	492

Average No. of meters read monthly	3448
No. of special inspections	1215
No. of meters sold	263
No. of meters set	468
No. of meters taken out of service	58
No. of meters in service	3683
No. of elevator indicators in use	60
No. of meters reset	40
No. of meters repaired	453
No. of meters tested	921
No. of elevator indicators repaired	3
No. of faucets repaired	819
No. of meter boxes packed	367
No. of brick meter boxes put in	113
No. of wooden meter boxes put in	114
No. of wooden meter boxes repaired	80
No. of wagons painted	2
No. of buggies painted	2
No. of road carts	1

METERS BOUGHT.

1½ in. Crown	78	1½ in. Trident	5	100
¾ in. Hersey	42	1½ in. Empire		1
2 in. Hersey	1--	3 in. Gem		1
1½ in. Nash	17			
1½ in. Trident	101			219

METERS RECEIVED FROM PLUMBERS AND CONSUMERS.

1½ in. Crown..	60	1½ in. Trident	27	
¾ in. Crown	5	1½ in. Trident	3	
1 in. Crown	4	1 in. Trident	2	30
¾ in. Hersey	16	1½ in. Nash		13
1 in. Hersey	2	1½ in. Worthington		2
1 in. Hersey	2			
				<hr/>
				164

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METERS SOLD.

½ in. Crown.....	77	½ in. Nash	16
¾ in. Crown	13	½ in. Empire.....	1
1 in. Crown.....	3	3 in. Gem	1
1½ in. Crown.....	1	⅝ in. Thompson.....	1
2 in. Crown.....	1— 95	⅝ in. Hersey	43
½ in. Trident.....	103		
¾ in. Trident.....	3— 106		<u>263</u>

METERS SET.

½ in. Crown.....	145	½ in. Trident.....	135
¾ in. Crown.....	22	¾ in. Trident.....	9
1 in. Crown	11	1 in. Trident.....	7— 151
1½ in. Crown.....	1	½ in. Nash	30
2 in. Crown.....	1	½ in. Empire.....	2
3 in. Crown	2	⅝ in. Thompson	2
4 in. Crown.....	1— 183	1 in. Lambert.....	1
⅝ in. Hersey	90	¾ in. Worthington.....	2
¾ in. Hersey	2	1 in. Union	1
1 in. Hersey	1— 95		<u>468</u>
3 in. Gem	1		

METERS IN STOCK.

½ in. Crown.....	2	¾ in. Hersey	2
¾ in. Crown	6	1 in. Hersey	1— 4
1 in. Crown.....	2	1 in. Union	1
1½ in. Crown	1	¾ in. Thompson	1
2 in. Crown	1	1 in. Thompson	1— 2
3 in. Crown	1	½ in. Trident	2
4 in. Crown	1— 14	¾ in. Trident	1— 3
⅝ in. Hersey	1		<u>24</u>

METERS REPAIRED.

½ in. Crown.....	128	⅝ in. Thompson.....	11
¾ in. Crown	59	¾ in. Thompson	3
1 in. Crown	25	1 in. Thompson	2— 16
1½ in. Crown.....	5	⅝ in. Worthington.....	7
2 in. Crown	17	¾ in. Worthington.....	3
3 in. Crown.....	11	1½ in. Worthington	4
4 in. Crown	4	2 in. Worthington.....	5— 19
6 in. Crown	5— 254	½ in. Nash	1
⅝ in. Hersey	121	½ in. Union	2
¾ in. Hersey	14	½ in. Empire.....	1
1 in. Hersey	6	½ in. Trident	5
1½ in. Hersey	2	¾ in. Trident	1— 6
2 in. Hersey	4	3 in. Gem	1
3 in. Hersey	1	¾ in. Lambert	1
4 in. Hersey	4— 152		<u>453</u>

Elevator indicators repaired..... 6

METERS IN SERVICE.

1/2 in. Crown	1419	6 in. Worthington	1—	49
3/4 in. Crown	501	1/2 in. Union	4	
1 in. Crown	182	3/4 in. Union	2	
1 1/2 in. Crown	57	1 in. Union	1	
2 in. Crown	58	3 in. Union	2—	9
3 in. Crown	57	1/2 in. Lambert	9	
4 in. Crown	45	3/4 in. Lambert	1	
6 in. Crown	3—2320	1 in. Lambert	1—	11
3/8 in. Hersey	820	1/2 in. Trident	144	
1/2 in. Hersey	100	3/4 in. Trident	13	
1 in. Hersey	44	1 in. Trident	6—	163
1 1/2 in. Hersey	11	1/2 in. Nash	32	
2 in. Hersey	14	1 in. Nash	1—	33
3 in. Hersey	15	1 1/2 in. Empire	13	
4 in. Hersey	7—1017	3/4 in. Empire	14—	27
3/8 in. Worthington	17	5/8 in. Thompson	38	
1/2 in. Worthington	10	3/4 in. Thompson	8	
1 in. Worthington	4	1 in. Thompson	3—	49
1 1/2 in. Worthington	5	2 in. Gem	1	
2 in. Worthington	6	3 in. Gem	4—	5
3 in. Worthington	4			
4 in. Worthington	2			3683

Elevator indicators in use (9)

Amount charged for meters sold	\$ 3,650.00
Amount of material used in setting and repairing meters, putting in and repairing meter boxes, repairing faucets, etc	1,441.94
Amount charged for material furnished to other departments.	100.80
Amount charged for twelve cast iron meter box covers, furnished to contractors and consumers	36.00
Amount charged for two cast iron meter box covers furnished to Grand Island, Neb	6.00
	<u>\$ 5,243.74</u>

For Inspection Department:
Repaired four street keys, one tapping machine.
Made three rifts.

Respectfully submitted,
J. F. ANDERSON,
Superintendent of Meters.

TURKEY CREEK STATION.

	Water. Gallons.	Coal. Pounds.
April 19th to 30th.....	108,368,768	680,318
May.....	305,296,907	2,016,433
June.....	320,437,572	2,011,520
July.....	353,523,901	2,343,830
August.....	324,142,136	2,342,874
September.....	357,579,596	2,397,657
October.....	318,561,006	2,419,317
November.....	271,832,939	1,989,060
December.....	330,264,545	2,224,212
January.....	281,761,470	1,981,225
February.....	243,026,435	1,486,577
March.....	257,244,818	1,511,631
April 1st to 18th.....	163,381,584	848,883
	<u>3,635,421,737</u>	<u>24,203,557</u>

12,101.1557 tons at \$1.28=\$15,490.27.

\$4.26 per million gallons.

Pay rolls, \$21,572.43.

Expense, \$4,306.85.

QUINDARO STATION.

	Water. Gallons.	Coal. Pounds.
April 19th to 30th.....	123,354,000	242,250
May.....	382,472,300	776,650
June.....	387,972,000	827,350
July.....	436,102,000	960,650
August.....	445,230,400	1,048,490
September.....	474,049,344	1,178,350
October.....	450,016,000	1,187,000
November.....	374,098,600	952,355
December.....	417,209,500	1,081,950
January.....	363,975,000	977,650
February.....	306,316,000	807,650
March.....	304,614,000	802,300
April 1st to 18th.....	166,778,000	392,850
	<u>4,632,187,144</u>	<u>11,235,495</u>

5,617.1495 tons at \$1.28=\$7,190.71.

\$1.55 per million gallons.

Pay rolls, \$12,504.36.

Expense, \$5,371.24.

WATER FURNISHED THE METROPOLITAN WATER COMPANY, 1897.

	Gallons.
April.....	71,496,000
May.....	81,914,400
June.....	92,448,000
July.....	110,707,200
August.....	125,215,000
September.....	128,952,000
October.....	126,108,000
November.....	117,072,000
December.....	122,983,200
January.....	84,369,600
February.....	38,102,400
March.....	19,385,646
Fowler's meter, 1897.....	299,443,212
Total.....	<u>1,418,196,658</u>

Fiscal Year 1898. Board of Public Works Department.
Disbursements.

Month 1898	Board of Public Works	Engineering Department	Streets and Alleys Department	Buildings Department	Steam Rollers	Total Expenses	Expended under Appropriation and Condem- nations	Total Dis- bursements
April 1st-30.....	212 00	\$1,016 00	\$2,075 75	625 00		\$4,704 81	601 50	\$4,906 40
May.....	712 50	1,339 75	8,076 12 1/2	577 31	\$1,237 55	15,554 36		15,554 36
June.....	621 50	4,771 75	8,004 00	571 13		14,659 07		14,659 07
July.....	612 10	4,774 75	8,887 00	573 73		14,528 05	1 00	14,529 05
August.....	683 50	5,390 00	7,119 50	679 03		13,963 67	637 58	14,501 25
September.....	632 00	4,003 01	6,772 02	700 03		12,277 06		12,277 06
October.....	755 50	4,885 50	7,002 75	746 53		13,420 35	70 13	13,490 48
November.....	701 70	4,285 50	4,926 17	743 43		10,667 33		10,667 33
December.....	554 31	2,951 50	4,200 40	750 73		8,525 94	187 51	8,713 45
January, 1899.....	537 50	2,906 05	4,849 10	716 46		9,012 01		9,012 01
February.....	537 50	3,117 50	5,304 55	640 33		9,680 38	625 00	10,315 38
March.....	537 50	3,735 00	11,050 19	914 19		16,337 24		16,337 24
April 1-17.....	313 50	2,071 01	4,004 00	497 17		7,847 35		7,847 35
Totals.....	\$7,115 04	\$40,524 05	\$84,382 80	\$8,158 80	\$1,237 55	\$151,049 02	\$1,792 81	\$152,771 83

Fiscal Year 1898. Board of Public Works.
Disbursements.

Fiscal Year 1898. Engineering Department.
Disbursements.

Month 1898	Pay Rolls	Horse Hire	Abstracts and Information	Blue Prints	Tools and Instruments	Furniture and Reprints	Stakes and Field Supplies	Office Supplies	Testing Brick	Re-setting Curbing	Totals
April 1-30	\$1,370 16	\$26 03	219 30	11 30		2 35	52 29	53 00			\$1,818 06
May	3,875 00	90 00	320 00			2 35	52 30	54 06	1 35		4,349 76
June	4,307 10	90 00	320 00		2 05			52 00			4,771 15
July	1,325 32	90 00	217 30			65 00	5 30	51 45			1,754 97
August	1,830 70	90 00	320 00	1 30		3 00	112 30	35			2,382 95
September	1,445 70	90 00	57	5 35	12 45	109 30	15 00	39 51			1,693 01
October	4,519 70	90 00	125 40					30	1 00	5 00	4,885 30
November	3,823 00	50 00	139 30					14 30		105 38	4,225 98
December	2,723 30	50 00	112 60								2,981 30
January, 1899	2,815 30	50 00	40 00				30 00	1 35			2,946 65
February	2,815 70	50 00	217 60								3,114 30
March	3,164 19	65 00	379 30					129 07			3,735 06
April 1-17	2,017 06	52 45			1 30						2,071 61
Totals	\$43,381 73	\$825 18	2,259 10	\$21 35	\$10 02	\$170 85	\$223 00	\$526 09	\$2 35	\$173 38	\$49,524 05

**Fiscal Year 1898. Buildings Department.
Disbursements.**

Month 1898	Pay Rolls	Type- writer	Office Supplies	Blue Prints	Badges	Totals
April 1898	\$286 00					\$286 00
May	573 73			\$4 25		577 98
June	550 13		\$1 00			551 13
July	553 73					553 73
August	674 13				\$1 50	675 63
September	700 00					700 00
October	716 50					716 50
November	717 73		75	\$5 00		743 48
December	740 73					740 73
January, 1899	708 00		9 53			717 53
February	630 00					630 00
March	775 33		134 00			909 33
April 17	380 17	\$117 00				497 17
Totals	\$6,101 00	\$117 00	\$150 14	\$29 25	\$1 50	\$6,428 89

**Fiscal Year 1898. Steam Roller Expenses.
Disbursements.**

Month 1898	Repairs	Rent	Totals
April 1898			
May			
June		\$1 267 56	\$1 267 56

PURCHASING AGENT'S REPORT.

Statement of Stamps Purchased for the Different City Departments for Fiscal Year Ending April 17, 1899.

	April 18-30	May	June	July	August	September	October	November	December	January 1899	February	March	April 1-17	Total
Water.....	\$ 73 40	\$79 55	\$133 (N)	\$ 86 (N)	\$142 (N)	\$64 (N)	\$ 98 (N)	\$158 (N)	\$78 50	\$91 60	\$157 (N)	\$88 15	\$100 (N)	\$1,344 20
Electrical Inspector.....	1 (N)	2 (N)	.....	2 (N)	2 (N)	3 (N)	2 (N)	1 (N)	2 (N)	2 (N)	2 (N)	2 (N)	.....	21 (N)
Park Board.....	.....	2 (N)	4 (N)	4 (N)	4 (N)	.....	12 (N)	4 (N)	4 (N)	4 (N)	8 30	50	4 (N)	50 80
City Treasurer.....	120 (N)	41 (N)	60 (N)	430 (N)	56 (N)	20 (N)	170 (N)	20 (N)	10 (N)	70 (N)	30 (N)	80 50	60 (N)	1,167 50
Plumbing Inspector.....	2 (N)	4 (N)	2 (N)	2 (N)	2 (N)	2 (N)	2 (N)	2 (N)	4 (N)	2 (N)	2 (N)	4 (N)	.....	30 (N)
License Inspector.....	44 (N)	8 25	.....	4 (N)	4 (N)	.....	8 (N)	.....	24 (N)	4 (N)	6 (N)	8 (N)	.....	110 25
City Comptroller.....	4 (N)	.....	.....	7 (N)	3 (N)	.....	4 (N)	.....	4 (N)	4 (N)	4 (N)	.....	.....	30 (N)
City Clerk.....	.....	10 (N)	4 (N)	6 (N)	.....	6 (N)	.....	.....	4 (N)	11 (N)	.....	20 (N)	.....	61 (N)
City Assessor.....	1 (N)	.....	.....	1 50	2 (N)	.....	2 (N)	.....	1 (N)	14 50	21 (N)	1 (N)	.....	44 (N)
Mayor.....	10 (N)	20 (N)	12 (N)	16 (N)	20 (N)	30 (N)	25 (N)	20 (N)	22 (N)	20 (N)	10 (N)	20 (N)	.....	225 (N)
Supt. Streets.....	2 (N)	2 25	2 (N)	1 (N)	2 (N)	1 (N)	2 (N)	2 (N)	.....	2 (N)	2 (N)	2 (N)	2 (N)	22 25
Supt. Buildings.....	.....	.....	6 (N)	2 (N)	50	2 (N)	2 (N)	.....	4 (N)	.....	2 (N)	2 (N)	2 (N)	22 50
Boiler Inspector.....	.....	.....	.....	1 (N)	.....	.....	.....	1 (N)	1 (N)	.....	1 (N)	.....	.....	4 (N)
City Auditor.....	7 (N)	.....	7 50	.....	4 (N)	.....	.....	3 (N)	.....	2 (N)	2 (N)	7 (N)	.....	32 (N)
City Engineer.....	.....	2 (N)	52 (N)	1 50	7 (N)	5 (N)	5 (N)	4 (N)	2 (N)	34 (N)	2 (N)	3 (N)	53 (N)	170 (N)
Legal Dept.....	.....	.....	6 10	5 (N)	1 50	2 (N)	.....	2 (N)	1 (N)	3 (N)	3 (N)	2 (N)	1 (N)	26 60
Clerk Supplies.....	1 (N)	4 (N)	3 (N)	4 (N)	4 (N)	2 (N)	2 (N)	3 (N)	3 (N)	2 (N)	5 (N)	4 (N)	2 (N)	30 (N)
Board Public Works.....	.....	22 (N)	.....	.....	.....	2 (N)	.....	1 (N)	2 (N)	.....	.....	.....	2 (N)	20 (N)
Fire Dept.....	.....	2 (N)	2 57	.....	3 (N)	2 (N)	8 (N)	.....	2 (N)	2 (N)	2 (N)	2 (N)	.....	26 17
Fire Patrol.....	.....	.....	.....	.....	4 (N)	.....	.....	.....	.....	2 50	.....	5 70	.....	12 20
Market Master.....	.....	2 60	.....	.....	.....	.....	.....	.....	.....	1 (N)	.....	1 (N)	.....	4 60
Hospital and Board of Health.....	2 (N)	12 (N)	10 (N)	4 (N)	20 (N)	4 (N)	4 (N)	4 (N)	4 (N)	14 (N)	4 (N)	4 (N)	20 (N)	100 (N)
Police Dept.....	.....	5 (N)	7 (N)	6 (N)	2 (N)	6 (N)	8 (N)	7 (N)	6 (N)	7 (N)	6 (N)	8 (N)	.....	68 (N)
Totals.....	\$267 40	\$218 75	\$311 17	\$563 (N)	\$283 (N)	\$151 60	\$354 (N)	\$252 (N)	\$173 50	\$202 60	\$269 30	\$204 85	\$246 (N)	\$3,647 16

District number	Brick sewers							Water pipe		Alley drops		Flush tanks	
	3 inch	41 inch		45 inch		48 inch							
	Price	Lineal feet	Price	Lineal feet	Price	Lineal feet	Price	Lineal feet	Price	No.	Price	No.	Price
No. 1												1	\$55.00
												1	70.00
		276.4	\$2.75	1023.8	\$3.08	778.9	\$1.88	52.8	\$.20			3	50.00
	\$2.28							158.3	.20			10	50.00
												1	60.00
No. 2								8.3	.25			1	65.00
										1	\$25.00		
		276.4		1023.8		778.9		251.4		1		17	

Dist. No.	Miscellaneous		Lineal feet	Total cost	Number tax bills	Drainage area square feet	Ratio of cost per 1000 sq. feet
		Amt.					
171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	Lin. ft. pipe for Lamp hole	2324.30	\$5088.46	139	445440	\$11.37.85	
	ft. pipe at 35c	2078.20	7070.96	134	523000	14.09.20	
	receptor.	3306.50	524.61	452	251000	22.314	
	water boxes and curb cocks.)	5055.00	14437.55	349	3408123	4.23.8704	
		11710.20	13753.31	235	1705000	8.06.628	
		2243.70	3219.80	458	4410007	72.8077	
	way box	610.60	447.62	95	427278	1.04.76	
	467.00	354.92	101	303100	97.720		
	\$406.25	25734.50	\$45477.32	1961			

4.87 miles.

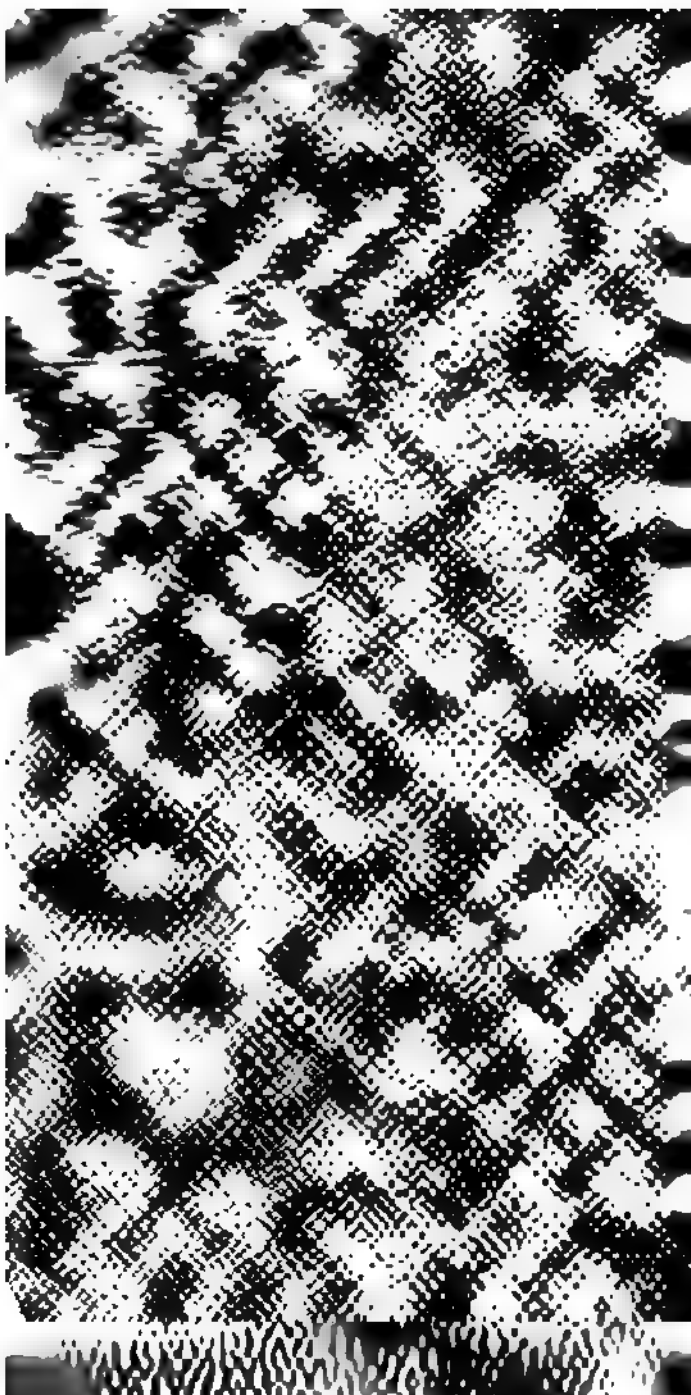
Public Sewers Constructed During Fiscal Year Ending April 17th, 1899.

Ordinance Number	Location	Pipe Sewers				Manholes	Excavation	Lumber	Lineal Feet	Total Cost
		8-inch	12-inch	18-inch	24-inch					
		Lineal Feet	Cost per Foot	Lineal Feet	Cost per Foot	Lineal Feet	Cost per Foot	Feet B M	Cost per 1000	
9226	Alley between Bellevue and Madison ave North of 10th st	82	30			2				2501 50
10046	Twelfth st from a point 88 feet West of Virginia ave to a point 87 West			85		1				84 00
10073	Alley between Central and Wyandotte at and 10th st and 11th st			181 4	57	1		10.04	220 00	707 36
10075	Alley between Central and Wyandotte at from 12th st to 18th st					3	310 6			310 60
10077										500 00
		86 1		45 4			310 6	10 04	1 200 70	\$1 173 85

Alley Grading Under Contract at Close of Fiscal Year Ending April 17th, 1899 at Noon.

Approximate Estimate											
Between	From	To	Lineal Feet	Cubic Yards Earth			Rock	Miscellaneous	Total Cost		
				Excavation	Price Cents	Embankment					
					Price Cents	Cubic Yards	Price				
Brooklyn ave. and Park ave.	Twenty-third st	Twenty-fourth st	401.50	17 1/2							
Cherry st. and Holmes st	Eleventh st	Twelfth st	360.50		77.70 18				\$ 13 90		
Charlotte st. and Campbell st	Eleventh st	Twelfth st	378.50		342.70 22				75 39		
Forest ave. and Tracy ave	Thirteenth st	Fourteenth st	447.00	425.40 27					114 96		
Locust st. and Cherry st	Tenth st	Eleventh st	384.50	462.10 22					101 66		
Mercier place and Holly st	Twenty-third st	Twenty-fourth st	625.00		2,785.50 21		Pipe 15 in.	Lin. feet 112	652 16		
Pennsylvania ave. and Washington st	Thirteenth st	North line of Roberts Addition	311 90	255.00 24 1/2					63 11		
Perry ave. and Twelfth st	Bellefontaine ave	Benton Boulevard	397.75		275.00 24				69 00		
4 Contracts	0 62 miles		3,265.55	1,142.50	3,400.90				\$1,087 17		

**Plank Sidewalks Under Contract at Close of Fiscal Year Ending
April 17, 1899, at Noon.**



Total
Cost

\$20,000.00

1700.56

\$21,700.56

1

1

1

2

SUMMARY.

PAY ROLL AND ACCOUNTS.

		TOTALS.	TOTALS.
1898.	April 18, to 30, Pay Roll	\$1,966 06	
"	April 18, to 30, Bills Paid	709 16	\$2,675 22
"	May, Pay Roll.....	7,585 78	
"	May, Bills Paid.....	1,090 34	8,676 12
"	June, Pay Roll.....	7,736 58	
"	June, Bills Paid.....	958 09	8,694 67
"	July, Pay Roll.....	6,723 99	
"	July, Bills Paid.....	1,863 86	8,587 85
"	August, Pay Roll.....	6,282 49	
"	August, Bills Paid.....	837 10	7,119 59
"	September, Pay Roll.....	5,332 44	
"	September, Bills Paid.....	889 58	6,222 02
"	October, Pay Roll.....	6,283 69	
"	October, Bills Paid	719 04	7,002 73
"	November, Pay Roll.....	4,205 68	
"	November, Bills Paid.....	730 49	4,936 17
"	December, Pay Roll.....	3,851 33	
"	December, Bills Paid	358 07	4,209 40
1899.	January, Pay Roll.....	4,061 92	
"	January, Bills Paid.....	787 48	4,849 40
"	February, Pay Roll.....	4,317 49	
"	February, Bills Paid.....	1,076 76	5,394 25
"	March, Pay Roll	6,150 31	
"	March, Bills Paid.....	4,900 18	11,050 49
"	April 1, to 17, Pay Roll.....	3,220 09	
"	April 1, to 17, Bills Paid.....	1,744 89	4,964 98
Total.....			\$84,382 89

Work Distributed on Streets.

Street	Cleaning		Paved Streets		Dirt and Macadam		Sewer Maintenance		Crosswalks		Sidewalks		Bridges		Miscellaneous	
	L's Rmd	Cost	Material	Labor	Material	Labor	Material	Labor	Material	Labor	Material	Labor	Material	Labor	Material	Labor
Askew							\$42 69	\$58 61	\$16 18	\$14 67						\$ 182 15
Archibald							33 40	21 25								54 65
Allen							93 90	194 75			\$78 61	\$114 06	\$49 18	\$89 32		\$2 54
Agnes			\$882 00	\$727 43			77 10	70 87	19 62	21 71						1937 23
Aimie	1	\$1 46														1 46
Broadway	246	435 59		15 50			106 45	133 41	2 34	2 12						695 41
Brooklyn	50	62 48					193 30	226 03	7 86	3 78	3 10	5 91	36	1 65		504 00
Bluff	117	223 61					19 00	111 20					13 29	13 16		390 86
Bell							11 75	15 50	14 15	15 16						56 56
Baltimore	103	141 36														141 36
Belefontaine	2	3 42					3 80	21 00	17 90	13 69			2 74	3 78		66 33
Brook			477 00	471 13							3 20	6 92				965 35
Blue River													3 26	7 57		10 83
Belvidere											1 03	8 78				4 81
Burgess																1 50
Bales							57 30	75 75								133 05
Bellevue							4 74	13 62	13 64	10 87	25 08	17 03				84 98
Cherry	97	149 86											1 03	8 78		205 32
Charlotte	85	112 09							31 71	1 68						175 04
Campbell	61	90 96		15 50			4 90	7 88	13 56	15 03						117 83
Central	113	188 63					2 31	75	6 64	7 36						245 09
College									03	1 68			22 12	37 25	1 34	66 20
Colorado							29 20	39 22								68 42
Cleveland				3 78					12 67	13 05			2 53	6 12		38 15
Cottage													1 38	5 68		7 06
Dora				1 90												1 90
Delaware	737	1128 61	123 80	103 75				4 88								1390 04
Dripp	57	63 62														63 62
Eight	329	452 51	85 50	118 61			57 04	72 72	22 74	22 94						832 06
Eighteenth	921	1159 25	82 80	42 75			34 96	120 15	22 85	25 83			4 90	70 30		1651 38
Eleventh	518	772 85		7 75			37 16	63 36	13 17	6 68					28	922 87
Elma																6 15
Euclid	10	16 03					30 12	42 95	2 37	3 78						146 42
Gilmwood									27 01	30 31						37 99
Forest	174	257 62							17 13	20 96						311 22
Flora	10	12 08					93	13 69	15 05	23 93						48 95
Fourth	88	32 20	13 50	16 50					14 46	13 24			40 76	120 78		233 21
Fifth	298	386 64	113 40	111 50			2 22	76	81	5 69						647 14
							3 85	28 02	61	4 22						

Work Distributed on Streets—Continued.

Work Distributed On Alleys.

	Months	Cleaning		Unpaved Alleys		Paved Alleys		Sewer Maint'e		Cross Walks		Totals
		No Loads Rem'd	Cost	Material	Labor	Material	Labor	Material	Labor	Material	Labor	
1947	April 18th to April 24th	18 1/2	\$ 39 41	..	..	..	..	\$ 4 00	\$ 30 54	..	..	\$ 88 95
1948	May ..	37 7 1/2	2184 21	..	..	..	..	56 30	119 14	..	..	2265 35
1948	June ..	46 1	529 61	..	..	..	..	7 55	12 71	..	..	568 32
1948	July ..	58	97 24	\$10 40	15 50	..	..	113 82	353 18	..	..	579 46
1948	August ..	58	119 21	60 80	92 80	..	..	42 40	22 18	..	..	418 40
1948	September ..	70	110 42	8 60	12 25	..	..	..	..	\$4 50	\$0 25	114 50
1948	October ..	69	104 70	..	18 50	..	..	1 63	13 57	..	..	136 23
1948	November ..	37	92 45	..	6 00	..	..	22 82	30 53	..	..	131 60
1948	December ..	44	47 72	..	..	..	..	1 07	69 25	..	..	140 34
1949	January ..	51	69 60	..	..	..	..	2 78	5 84	5 21	\$ 98	162 61
1949	March ..	126	96 00	10 60	14 25	..	..	..	..	..	..	192 84
1949	April ..	26	53 51	..	..	..	..	3 70	12 86	..	..	71 38
	Totals	477 1/2	\$5512 13	\$25 50	\$128 75	..	..	\$-83 56	\$750 96	51	\$13 18	\$1758 61

Miscellaneous Work.

Building Permits Issued by Months as Follows:

APRIL 18th, NOON, to April 30th, 1898.

No. of Permits.	Kind of Buildings.	Front Feet.	Estimated Cost.	Fees.
4	Brick business - - -	144	\$ 8900 00	\$ 4 45
11	Brick residence - - -	350	26500 00	18 25
10	Frame residence - - -	479	26200 00	14 90
1	Frame barn - - -	14	200 00	50
1	Frame warehouse - - -	60	1200 00	60
92	Miscellaneous permits -	-	25630 00	49 50
128	Total for month - -	1047	\$98730 00	\$88 20

MONTH OF MAY, 1898.

No. of Permits.	Kind of Buildings.	Front Feet.	Estimated Cost.	Fees.
3	Brick business - - -	77	\$ 5700 00	\$ 2 85
10	Brick residence - - -	512	57100 00	29 90
1	Brick barn - - -	24	500 00	50
1	Brick warehouse - - -	48	2500 00	1 25
1	Brick freight depot - -	35	11500 00	5 75
48	Frame residence - - -	1080	83200 00	44 35
1	Frame office - - -	14	500 00	50
1	Frame warehouse - - -	85	1600 00	80
101	Miscellaneous permits -	-	104540 00	131 95
266	Total for month - -	1834	\$267140 00	\$217 85

MONTH OF JUNE, 1898.

No. of Permits.	Kind of Buildings.	Front Feet.	Estimated Cost.	Fees.
4	Brick business - - -	133	\$ 13800 00	\$ 7 00
14	Brick residence - - -	398	48000 00	24 00
1	Brick church - - -	61	12000 00	6 00
1	Brick school - - -	56	9000 00	4 50
2	Frame business - - -	46	600 00	1 00
45	Frame residence - - -	1076	78500 00	42 20
6	Frame barns - - -	138	2100 00	3 00
1	Frame warehouse - - -	24	300 00	50
1	Frame church - - -	28	300 00	50
1	Frame Greenhouse - - -	56	1500 00	75
235	Miscellaneous permits -	-	35630 00	121 40
311	Total for month - -	2016	\$204780 00	\$210 85

MONTH OF JULY, 1898.

No. of Permits.	Kind of Buildings.	Front Feet.	Estimated Cost.	Fees.
2	Brick business - - -	54	\$ 10000 00	\$ 5 00
14	Brick residence - - -	557	85200 00	42 00
1	Brick barn - - -	18	400 00	50
1	Brick school - - -	47	9000 00	4 50
1	Brick hotel - - -	116	150000 00	75 00
1	Brick Convention Hall -	198	75000 00	37 50
1	Brick rolling mill - -	120	10000 00	5 00
1	Frame business - - -	14	300 00	50
60	Frame residence - - -	1361	87300 00	48 50
1	Frame car barn - - -	30	1000 00	50
142	Miscellaneous permits -	-	53600 00	86 70
225	Total for month	2515	\$481800 00	\$905 70

REPORT

OF THE

Superintendent of the Water Department.

FOR 1899.

OFFICERS OF THE WATERWORKS DEPARTMENT.

Water Commissioners—GEO. S. GRAHAM, President.

GEO. P. HARDESTY.

M. V. WATSON,

B. T. WHIPPLE.

Secretary, R. M. GODFREY.

Superintendent, D. W. LONGWELL.

Chief Clerk—CHAS. E. RICKERT.

Engineer—WYNKOOP KIERSTED.

Assessor and Collector Water Rates—C. S. SQUIER.

Chief Clerk—J. B. LAWRENCE.

Engineer in Charge Turkey Creek Station—JOSEPH L. CHAPMAN.

Engineer in Charge Quindaro Station—JOHN F. SICKELS.

The lighter pipe, which are not less than standard weight pipe, is for use for elevation above 150 feet, and the heavier pipe for elevations below 150 feet, city datum. This table provides for the same classification of pipe weights as recommended by the Board of Engineers in October 1891, who reported on a new water works for Kansas City, except that the weights or thickness of iron herein recommended is less, since our regular service covers a range of pressure or head from 300 to 400 feet, while that estimated on and by the said Board was 340 to 455 feet above the city datum.

I beg to thank you for the support afforded me in carrying out the allotted work.

Respectfully submitted,

WYNKOOP KIERSTED.

Chief Engineer.

RECEIPTS AND EXPENDITURES.

Balance with Treasurer April 18, '98....		\$121,693.12
Total Receipts		410,570.29
Assessor and Collector	\$ 11,136.89	
Operating Expenses	119,148.89	
Betterment of Plant.....	86,072.22	
Interest on Bonds	138,195.00	
Balance with Treasurer April 17, '99 ...	177,710.41	
	<u>\$532,263.41</u>	<u>\$532,263.41</u>

PAY ROLLS AND VOUCHERS—1899.

Department.	Pay Rolls.	Vouchers.	Total.
Supt., Engineer and Office....	\$ 7,479.17	\$ 423.85	\$ 7,903.02
Street.....	9,519.13	1,998.21	11,517.34
Inspection.....	11,427.02	1,405.74	12,832.76
Meter.....	9,800.36	1,288.66	11,089.02
Turkey Creek.....	20,161.39	17,119.15	37,280.54
Quindaro.....	13,398.83	12,645.67	26,044.50
Miscellaneous ..	1,003.55	5,342.32	6,345.87
Barn.....	2,114.63	2,476.00	4,590.63
Construction	245.56	1,299.65	1,545.21
Assessor and Collector.....	9,318.18	1,818.71	11,136.89
Betterment.....	1,416.82	7,433.00	8,849.82
Appropriations	28,490.02	48,732.38	77,222.40
	<u>\$114,374.66</u>	<u>\$101,983.34</u>	<u>\$216,358.00</u>

May 24th, 1899.

D. W. Longwell, Superintendent Water Department.

SIR:—I herewith submit my annual report of Street Division of Water Department, showing work of construction and repair for fiscal year ending April 17th, 1899.

Respectfully,

J. S. CANNON,

Street Foreman.

**Inventory of Material Used and Stock on Hand April 17th, 1899,
by Street Department.**

CAST IRON PIPE.

Size	Received	Disposed of and Laid	On Hand	
			April 18, 1898	April 17, 1899
			Lineal Feet	Lineal Feet
3-Inch	.....	48	180	132
4 "	8472	8474	2042	2040
6 "	48936	48156	11791	12571
8 "	756	5700	6372	1428
10 "	.....	.....	182	182
12 "	.....	.....	60	60
15 "	.....	24	36	12
16 "	.....	.....	72	72
20 "	.....	60	120	60
24 "	.....	.....	48	48
30 "	.....	.....	36	24

Report of the Work Done by the Street Division of Waterworks Department from April 18th, 1898 to April 17th, 1899

Month	Hydrants					Valves					Cubic Feet Excavat'n for Pipe	Cubic Feet Excavat'n (Other than Pipe)	Cubic Lead Le'ks Repaired	Mains Laid Sizes			Pipe Lowered Miscellaneous	Loads Hauled		Night Calls from Inspector	Breaks in Main	
	Miscellaneous Work on Hydrants					Miscel. Work on Valves								New Pipe				Pipe	Dirt			
	Repacked and Caulked	Moved and Reset	Tested and Oiled	Repaired	New	Inspecti'n	Repacked	New	Repaired	Inspected				Valve Set Covers Set	4-in	6-in						8-in
April 18 to 30, '98.....	51	1	84	2	1	.....	12	1	.....	.....	1	8220	1400	.....	.....	.....	410	16	23	6	2
May.....	90	.....	33	6	7	.....	20	0	.....	.....	2	34400	3200	4	456	3138	648	46	28	18	.....
June.....	111	11	22	6	4	.....	45	5	.....	3	8	11250	4150	11	828	48	385	64	34	21	1
July.....	50	5	23	10	14	.....	32	0	.....	.....	31	57672	10000	1	72	6386	.....	184	62	14	3
August.....	90	3	55	16	23	.....	35	11	.....	21	38	76106	6400	.....	374	7872	.....	98	57	22	.....
September.....	65	8	21	10	14	.....	16	16	1	.....	34	67320	5000	.....	1512	5808	.....	74	40	17	.....
October.....	93	1	20	18	13	.....	17	5	1	219	17	34732	4800	20	696	2052	.....	65	123	28	2
November.....	60	6	86	21	24	162	18	12	2	484	13	65256	9000	.....	936	5028	1320	48	175	42	1
December.....	42	4	.....	20	1	6498	4	8	.....	205	3	.....	2000	.....	72	144	.....	40	168	42	1
January, 1899.....	32	.....	.....	20	11	5050	4	0	1	452	0	5200	1200	7	60	4608	40	40	58	42	2
February.....	35	.....	.....	30	.....	6791	.....	.....	.....	31	.....	1332	.....	4	.....	.....	.....	18	44	97	.....
March.....	62	.....	.....	18	24	1217	12	6	.....	607	4	104852	700	4	1428	5544	4654	120	60	28	1
April 1 to 17.....	26	.....	21	11	18	.....	12	14	.....	.....	5	75000	2000	3	1272	6180	114	90	135	13	1
Totals.....	855	84	374	206	154	19718	231	105	5	2022	165	545584	49650	54	7706	48378	6458	833	1007	300	14	

METERS SOLD.

½ in. Trident	-	-	-	-	-	-	-	53	\$10 00	\$ 530 00
2 in. "	.	.	.	.	.	.	.	1	50 00	50 00
½ in. Crown, second-hand	.	.	.	.	.	.	.	10	10 00	100 00
½ in. "	"	"	.	.	.	.	.	1		5 50
¾ in. "	"	"	.	.	.	.	.	7	15 00	105 00
1 in. "	"	"	.	.	.	.	.	4	20 00	80 00
1½ in. "	"	"	.	.	.	.	.	2	40 00	80 00
2 in. "	"	"	.	.	.	.	.	2		125 00
⅝ in. Hersey	"	"	.	.	.	.	.	3		31 50
⅝ in. Thomson	"	"	.	.	.	.	.			7 00
										<hr/>
										\$1114 00

AMOUNT CHARGED FOR LABOR.

To plumbers and consumers	.	.	.	.	.	.	.	\$3307 70
To city	.	.	.	.	.	.	.	981 00
To inspection department	.	.	.	.	.	.	.	2 25
								<hr/>
								\$4290 95

FOR MATERIAL USED IN REPAIRING AND SETTING METERS, PUTTING IN METER BOXES, ETC.

To plumbers and consumers	.	.	.	.	.	.	.	\$1004 95
To city	.	.	.	.	.	.	.	745 19
To inspection department	.	.	.	.	.	.	.	10 07
								<hr/>
								\$1760 21

METERS SET.

⅝ in. Hersey	.	.	149	¾ in. Trident	.	.	3
¾ in. "	.	.	5	2 in. "	.	.	1
1 in. "	.	.	3	1½ in. "	.	.	1
1½ in. "	.	.	2	6 in. "	.	.	1— 97
2 in. "	.	.	1	⅝ in. Lambert	.	.	8
4 in. "	.	.	1— 161	¾ in. "	.	.	2
½ in. Crown	.	.	95	1 in. "	.	.	1— 11
¾ in. "	.	.	29	⅝ in. Thomson	.	.	1
1 in. "	.	.	6	¾ in. "	.	.	1
1½ in. "	.	.	2	1 in. "	.	.	1 3
2 in. "	.	.	4— 136	½ in. Empire	-	-	1
½ in. Nash	.	.	91	⅝ in. Pittsburg	-	-	28
¾ in. "	.	.	4	⅝ in. Worthington	-	-	3
2 in. "	.	.	1	10 in. Gem	-	-	2
1 in. "	.	.	2— 98				<hr/>
½ in. Trident	.	.	91				540

METERS REPAIRED.

½ in. Crown	-	-	198	2 in. Trident	-	-	1— 94
¾ in. "	-	-	88	½ in. Nash	-	-	15
1 in. "	-	-	38	1 in. "	-	-	1— 16
1½ in. "	-	-	11	⅝ in. Worthington	-	-	5
2 in. "	-	-	12	¾ in. "	.	.	6
3 in. "	-	-	15	1½ in. "	.	.	1
4 in. "	-	-	9	2 in. "	.	.	1
6 in. "	-	-	2— 373	6 in. "	.	.	1— 14
⅝ in. Hersey	-	-	177	⅝ in. Thomson	.	.	8
¾ in. "	-	-	20	¾ in. "	.	.	2— 10
1 in. "	-	-	15	½ in. Union	.	.	1
1½ in. "	-	-	2	¾ in. "	.	.	1— 2
2 in. "	-	-	6	⅝ in. Pittsburg	.	.	2
3 in. "	-	-	7— 227	½ in. Empire	.	.	3
½ in. Trident	-	-	81	⅝ in. Lambert	.	.	1
¾ in. "	-	-	6	3 in. Gem	.	.	1
1 in. "	-	-	5				<hr/>
1½ in. "	-	-	1				743

Statement of Alleys Paved During Fiscal Year Ending April 16, 1900.—Continued.
Trinidad Lake Asphalt.

Between	From	To	Thick- ness Inches	Founda- tion	Lineal Feet	Square Yards	Price per Square Yard	Total Cost	No. of Tax Bills
Garfield av & Euclid av.	Seventh st.	Eighth st.	1 1/2	1 1/2 in Bit Conc. 1 in Concrete	233.00	101.50	\$2 12	\$851 18	19
1 Contract.				.065 Miles					

Artificial Stone Combined Curb and Gutter Constructed During Fiscal Year Ending April 16, 1900.

Street	Side	From	To	Constructed by Public Contract				Total Const	No of Tax Bills
				Lineal Feet	Price per Foot	Amt.	Lineal Feet	Lineal Feet	
Benton blvd.	Both	Twenty-fourth st.	Thirty-first st.	43.2	\$.75	\$ 32.40	9,765.25	9,808.45	10
Tenth st.	"	Bellevue av.	Bales av.				2,000.15	2,000.15	1
Independ. av.	"	Benton Boulevard.	Cleveland av.				2,618.06	2,618.06	1
Thirty-sixth st.	"	Holmes st.	Campbell st.	1,202.61	.57 ¹ / ₂	726.00		1,202.61	1
Benton blvd.	"	Fifteenth st.	Twenty-fourth st.				9,879.07	9,879.07	1
Thompson av.	"	Indiana av.	Monroe av.	2,357.50	.57	1,352.10		2,357.50	1
Metz st.	"	Indiana av.	Fortieth st.				1,663.70	1,663.70	1
Benton blvd.	"	Thirty-ninth st.	Hanover Place Ad.				642.00	642.00	1
Independ. blvd.	"	Thirty-sixth st.	Fifteenth st.				9,279.72	9,279.72	1
Indiana av.	"	Eighty st.	Woodland av.	294.42	.65	152.37	4,330.32	4,424.74	1
Aldine Place	East	Windsor av.	St John av.				314.00	314.00	1
Walrond av.	Both	Washington st.	240 ft east				253.40	253.40	1
Indiana av.	"	Norledge Place	Gladstone Blvd	1,435.85	.54 ¹ / ₂	782.53	688.10	688.10	21
		Tenth st.	Twelfth st.					1,435.85	
14 Contracts		9.16 Miles		5,813.64		3,025.70	43,090.37	46,116.01	730

Plank Sidewalks Constructed During Fiscal Year Ending April 16, 1900.—Continued.

Street	Side	From	To	Constructed by Public Cont.			Constructed by Private Cont.			Total Constructed	No. of Bills		
				Width—Feet	Lineal Feet	Price per Foot	Amount	Lineal Feet	Price per Foot			Amount	
Norton ave.	Both	Sixteenth st.	Nineteenth st.	5	2,989.06	.32 5-12	\$ 966 03			2,980.06	\$ 966 03	89	
Chestnut ave.	West	Peery ave.	Twelfth st.	5	127.80	.33 1/2	42 81	114.00	\$.33	87 62	241.80	80 43	
Twenty-fifth st.	South	Baltimore ave.	Central st.	5	641.70	.319	223 95				641.70	223 95	
Tenth st.	South	Elmwood ave.	E line of lot 1 Block 5										
Prospect ave.	East	Thirty-first st.	MtVernon Junct add	5	733.50	.322	236 19				733.50	236 19	
Seventeenth st.	North	Jackson ave.	Thirty-fifth st.	5	2,458.80	.329	808 94				2,458.80	808 94	
Woodland ave.	East	Thirty-first st.	Hardesty ave.	5	3,537.30	.315 1/4	1,224 79				3,537.30	1,224 79	
			Thirty-second st.	5	282.50	.33	93 22				282.50	93 22	
86 Contracts					88,792.31		\$ 30,458 73	6,464.00	\$	2,078 63	95,256.31	\$32,537 36	1584
		18.04 miles	Total										

Brick Sidewalks Under Contract at Close of Fiscal Year Ending April 16, 1900.

Street	Side	From	To	Approximate Estimate			
				Width Feet	Lineal Feet	Square Feet	Amount
Madison ave	Both	Twenty-first st.	Twenty-third st.	6	426.00	2,555.80	\$ 206 06
Twentieth st	South	Baltimore ave	Wyandotte st	6	805.80	1,838.35	146 67
Harrison st	Both	Nineteenth st.	Twentieth st.	6	100 00	600.00	61 50
Fifth st.	North	Forest ave.	Lydia ave.	6	680.00	4,000.00	320 00
4 Contracts.		.28 Miles.			1,497.00	8,989.15	\$ 734 23

Alley Grading Under Contract at Close of Fiscal Year Ending April 16, 1900.

Between	From	To	Approximate Estimate				
			Lineal Feet	Excava- tion	Price	Cuble Yards Earth	Miscel- laneous Amount
Agnes ave and Bellefontain ave.	Sixteenth st	Seventeenth st.	423.05	1,200.00	\$.15		\$ 180 09
Troost ave and Forest ave.	Ninth st.	Tenth st.	383.00	319.70	.25		79 93
Immediately North of Fifteenth st	Charlotte st.	Campbell st.	336.00	789.20	.25		197 80
Cherry st and Holmes st.	Twelfth st	Thirteenth st.	705.07	396.60	.34 1/2		136 83
Indiana ave and Bales ave.	From the North line of the alley		244.75	291.10	.35		101 89
Tenth st and Eleventh st.	Immediately North of 12th st.		371.00	1,473.50	.249		366 90
Benton Boulevard and Chestnut ave.	Bellefontaine ave	Benton Boulevard	334.27	390.20	.25		97 55
Troost ave and Forest ave.	Howard st.	Twenty-fifth st.	380 00			1,043.00	283 10
8 Contracts	Twenty-second st.	Twenty-third st.	3,177.14	4,840.90		1,043.00	\$1,393 59
	.60 Miles						

Stone Block Paving—Reconstructing Under Contract at Close of Fiscal Year Ending April 16, 1900.

Street	From	To	Approximate Estimate				
			Paving Square Yards	Price	New Blocks		Amount
					Square Yards	Price	
Mulberry st.	Union ave.	Eleventh st.	2,159.00	\$.58	787.00	\$ 1.95	\$3,954 03
1 Contract			2,159.00		787.00		\$3,956 03

Statement of Condemnation Cases During Fiscal Year Ending April 16, 1900.

Ordinance	Street or Alley	From	To	Verdict Rendered	Benefits	Status of Case
No.	Approved			Mayor's Court	Kansas City	Property Owners
11744	May 1, 1899	Alley bet. Woodland and Mich. aves	Thirty-eight st	Oct. 4, 1899	1 00	\$ 802 00 Complete
11745	May 1, 1899	Wabash ave	Thirty-third st	Oct. 17, 1899	1 00	3 819 00 "
11746	May 1, 1899	Independence ave	K.C. Belt Right of way	Dec. 15, 1899	1 00	82,228 00 Collecting
11627	May 11 1899	Richmond st	K.C. Extension add	Jan. 1, 1900	1 00	1,000 00 Appealed
						1,424 50 "
						2,100 00 Complete
						4,000 00 "
						8,100 00 Collecting
						1,100 00 "
						1,000 00 Appeal
						201 50 Complete
						1,100 00 "
						250 00 Collecting
						Repealed
						602 00 Complete
						Repealed
						No proceedings
						700 00 Collecting
						Repealed
						100 75 Complete
						141 00 Collecting
						948 00 Appeal, Ver. not comf'd
						Repealed
						800 00 Collecting
						1,000 00 Appeal
						4,004 00 "
						8,370 00 "
						pending
						Property decided
						pending

ELEVENTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF STREETS

For the Fiscal Year Ending April 16, 1900.

To the Honorable Board of Public Works, Kansas City, Mo.

GENTLEMEN:—I herewith submit to you a report of the operations of the Street Department for the year ending April 16, 1900, showing by tabulated statements how and for what purposes the funds apportioned to the Department have been used.

Respectfully yours,

WM. M. SLOAN,

Superintendent of Streets.

SUMMARY.

PAY ROLL AND ACCOUNTS.

1899.	April 18th to 30th, Pay Roll	\$5,557 14	
"	" " Bills Paid	141 05	\$5,698 19
"	May, Pay Roll	8,923 90	
"	" Bills Paid	2,256 79	11,180 69
"	June, Pay Roll	7,844 31	
"	" Bills Paid	819 68	8,663 99
"	July, Pay Roll	8,017 04	
"	" Bills Paid	1,804 13	9,821 17
"	August, Pay Roll	5,392 86	
"	" Bills Paid	933 83	6,326 69
"	September, Pay Roll	5,767 08	
"	" Bills Paid	2,141 10	7,908 18
"	October, Pay Roll	5,008 49	
"	" Bills Paid	665 19	5,673 68
"	November, Pay Roll	3,536 44	
"	" Bills Paid	1,440 30	4,976 74
"	December, Pay Roll	3,075 54	
"	" Bills Paid	1,592 58	4,668 12
1900.	January, Pay Roll	4,170 27	
"	" Bills Paid	302 11	4,472 38
"	February, Pay Roll	2,125 52	
"	" Bills Paid	936 26	3,061 78
"	March, Pay Roll	3,758 74	
"	" Bills Paid	484 75	4,243 49
"	April, 1st to 16th, Pay Roll	2,084 28	
"	" Bills Paid	666 69	2,750 97
Total			\$ 79,446 07

Miscellaneous Expense.

Months 1899	Salaries of Supt. and Clerks		Maintenance of Horses and Mules and Pur. of Same		Repairs	City Yard, 20th and Vine, Maintenance		Totals
	\$	cts	\$	cts		\$	cts	
April 18th to 20th.	316	25	65	28				238 86
May	316	66	150	33	101 00			1,018 87
June	316	66	150	13	95 05			761 27
July	316	64	150	94				769 67
August	316	66	150	25	139 70			707 01
September.	316	66	150	34	73 90	843 96		851 67
October.	316	66	150	95	25 40			640 75
November.	316	66	150	30				641 19
December.	316	66	150	00	61 25	2 00		1,048 38
January—1900	316	66	150	00	63 10	7 25		674 77
February	316	66	150	00	36 95	3 50		649 17
March.	316	66	150	00	46 40			645 81
April 1st to 16th.	179	49	85	50	29 50			539 99
Totals	\$3,840	00	\$1,840	58	\$684 85	\$107 31		\$9,756 33

Summary—April 18, 1899, to April 16, 1900.

Total expense on streets	\$36,876 55
Total expense on alleys	4,558 96
Total expense on miscellaneous work	6,795 91
Total miscellaneous expense account	9,756 33
Estimated value of material on hand	1,454 32
Total	\$79,446 07

Work Distributed on Streets.

Streets	Cleaning		Paved Streets Dirt and Mac.		Sewer Maint.		Crownwalks		Sidewalks		Bridges		Miscellaneous		Total		
	Loads	Cost	Mat'rl	Labor	Mat'rl	Labor	Mat'rl	Labor	Mat'rl	Labor	Mat'rl	Labor	Mat'rl	Labor			
Twentieth	141	\$ 156 29			\$ 76 66	\$ 54 06	\$ 12 65	\$ 4 18		\$ 1 92	\$ 6 71	\$ 8 48	\$ 8 32		\$ 315 64		
Twenty-first	22	24 09			72 24	55 11	28 49	11 63							195 49		
Twenty-fifth					58 43	68 34	38 92	35 30							391 38		
Twenty-eighth	9	13 96			71 11	65 50	19 72	24 09		14	1 79				208 82		
Twenty-ninth					14 79	13 38	38 98	48 80							167 75		
Third	246	316 62	\$ 65	\$ 1 04											334 51		
Topping															44 84		
Thirty-third	8	7 00			42 00	11 01	14 74	10 34							95 67		
Thirty-second	16	37 15			89 00	4 51									93 49		
Trout	144	415 84			151 00	51 32									970 13		
Twenty-third	14	16 03			84 07	71 27	38 42	28 01		15 27	3 43	132 45	81 95	2 19	276 05		
Thirtieth	9	11 34			18 00	1 82	18 12	8 01				6 32	12 01		117 50		
Tracy	47	95 49			49 35	51 32	18 12	8 01							222 59		
Thirty-fifth	1	1 78			67 25	32 75	76 41	41 25				7 59	8 47		265 75		
Thirty-sixth	38	29 86													29 86		
Thompson	3	6 13													6 13		
Union	15	18 70	4 34	24 10	21 07	34 85				42 30	31 70	19 89	73 14		196 38		
Village															85 94		
Vine	10	23 56				3 70	22 81	19 01				4 87	4 28	74	196 89		
Virginia	8	14 31													14 31		
Washington	80	134 77	3 30	9 25	28 37	29 22	12 25	10 02							346 33		
Westport	33	35 00			395 00	211 50									614 50		
Walnut	1301	1783 87			32 16	49 73	5 52	3 57		6 60	7 57				1,849 02		
Westport road															13 28		
Woodland	40	62 75			11 32		6 08	4 22				1 30	1 68	23	166 36		
Wornall road					943 00	730 75	30 85	25 65				3 30	17 68		1,654 35		
Wyoming	154	95 38					11 49	9 56				2 21	5 37		127 54		
Wabash	51	62 30													62 30		
Warrick blvd	68	71 01													74 76		
Waldron	10	11 49													74 31		
Wall	49	103 03													103 03		
Wyandotte	251	425 01													425 01		
Whittier	1	1 46													1 46		
Woodworth	1	3 83													3 83		
Total	1837	\$34526 14	\$48 42	\$3,365 44	\$1165 44	\$5,970 00	\$1030 10	\$4201 14	\$1096 80	\$1349 39	\$213 07	\$276 42	\$3018 47	\$1873 05	\$55 13	\$165 84	\$56,876 55

Work Distributed on Alleys.

Months 1899	Cleaning		Unpaved		Paved		Sewer Maint'ce		Cross Walks		Totals
	Loads Rem'd	Cost	Mat'er- ial	Labor	Mat'er ial	Labor	Mat'er- ial	Labor	Mat'er- ial	Labor	
April 18th to 30th.....	153	\$ 176 20	.....	.....	.....	.....	\$31 15	\$16 75	.....	.....	\$ 254 10
May	4,657	2,096 44	.....	.....	.....	.....	58 98	99 53	.....	.....	3,144 95
June	62	13 11	\$22 50	\$21 25	\$12 04	\$12 63	10 82	70 44	.....	.....	242 79
July	36	17 46	.....	14 00	4 95	3 65	.....	.....	.....	.....	40 06
August.....	30	56 33	.....	.....	75	1 26	.....	.....	\$ 2 68	\$ 7 38	68 40
September	73	96 23	.....	.....	.....	.....	.....	.....	14 88	13 78	124 09
October.....	28	40 61	.....	.....	.....	.....	.....	.....	6 78	3 58	50 17
November	50	66 73	19 26	47 00	.....	.....	6 78	9 19	28 11	16 73	193 10
December.....	11	23 15	.....	.....	.....	.....	.....	9 51	4 20	2 70	39 56
January—1900	33	37 54	.....	.....	.....	.....	2 47	75	32 14	18 26	91 20
February	9	13 75	.....	.....	.....	.....	2 64	3 38	17 15	12 30	49 22
March	110	87 62	.....	.....	8 93	11 70	2 01	10 90	32 14	18 26	171 59
April 1st to 16th.....	.....	.....	.....	.....	.....	.....	3 79	12 47	41 95	29 42	87 63
Total.....	5,262	\$ 3,095 21	\$41 76	\$82 25	\$26 67	\$29 24	\$ 118 67	\$ 202 92	\$ 180 03	\$ 122 20	\$ 4,558 96

Miscellaneous Work

Months 1899	Cutting Weeds	City Yards	Washing Streets	Flushing Sewers	Street Signs		Miscellaneous		Total
					Material	Labor	Material	Labor	
April 1st to 30th.		\$25 50	\$221 24	\$152 68			\$ 1 00	\$ 13 50	\$ 191 68
May		52 50	202 50	175 84			43	4 75	458 38
June		48 75	240 00	164 04			2 00	17 44	540 72
July	\$156 50	57 75	224 25	191 52			8 43	8 01	628 30
August	306 20	52 50	258 50	164 80		\$ 7 00	1 61	29 01	1 74 00
September		50 75		240 20	\$18 63	240 06	2 72	04 46	509 78
October		52 50		164 22	514 18	278 25	61 27	40 37	1,140 65
November		50 75		137 16	480 85	142 08	21 90	61 67	1,047 01
December		49 00		104 85	286 25		40	45 25	631 64
January—1900.		47 50	27 50					12 50	192 75
February		50 75		108 81				15 75	175 31
March		52 50		198 25			5 25	8 50	264 50
April 1st to 16th		24 50		81 61			3 80	10 90	120 81
Totals	\$522 79	\$615 25	\$1,238 90	\$ 2 059 03	\$ 1,109 91	\$717 39	\$108 84	\$ 332 11	\$6,795 91

Work Distributed on Alleys.

Months 1899	Cleaning		Unpaved		Paved		Sewer Maint'e		Cross Walks		Totals
	Loads Rem'd	Cost	Material	Labor	Material	Labor	Material	Labor	Material	Labor	
April 18th to 30th.....	153	\$ 176 20	.....	.....	.....	.....	\$31 15	\$46 75	.....	.....	\$ 254 10
May	4,607	2,996 44	.....	.....	.....	.....	58 08	99 53	.....	.....	3,114 95
June	62	63 11	\$22 50	\$21 25	\$12 04	\$12 03	10 82	70 44	.....	.....	242 79
July	36	17 16	.....	14 00	4 95	3 65	.....	.....	.....	.....	40 06
August.....	50	56 33	.....	.....	75	1 26	.....	.....	\$ 2 68	\$ 7 38	68 40
September	73	96 23	.....	.....	.....	.....	.....	.....	14 88	13 18	124 09
October.....	28	40 61	.....	.....	.....	.....	.....	.....	6 78	3 58	50 17
November.....	50	66 73	19 26	47 00	.....	.....	6 78	9 19	28 11	16 73	193 10
December.....	11	23 15	.....	.....	.....	.....	.....	9 51	1 20	2 70	39 56
January—1900	33	37 54	.....	.....	.....	.....	2 47	75	32 14	18 26	91 20
February	9	13 75	.....	.....	.....	.....	2 64	37 38	17 15	12 30	49 22
March	110	87 62	.....	.....	8 93	11 70	2 01	10 00	32 14	18 26	171 59
April 1st to 16th.....	.....	.....	.....	.....	.....	.....	3 79	12 47	41 95	29 42	87 63
Total.....	5,202	\$ 3,095 21	\$41 76	\$82 25	\$26 67	\$29 24	\$ 118 67	\$ 262 92	\$ 180 03	\$ 122 20	\$ 4,558 96

Total Permits Issued for Excavations from April 18, 1899 to April 16, 1900.

Months 1899	Water		Sewers		Gas		Poles		Totals
	By Plumbers		By Plumbers		K.C. Mo Gas Co.				
	Repairs	Services	Repairs	Services	Main	Spoke	Setting and Re-setting		
April 1st to 30th.	24	33	27	58	2	65	24		232
May	176	27	12	123	2	110	67		614
June	87	94	6	93	3	121	47		522
July	89	82	1	87	6	97	82		495
August	102	96	2	72	3	131	64		562
September	78	92	8	61	1	98	41		485
October	84	87	31	115	1	107	34		482
November	76	85	51	124	1	86	24		426
December	72	46	38	97		74	17		345
January, 1900.	66	81	39	101	1	46	67		389
February	83	98	27	94	3	80	30		428
March	64	74	10	72	5	102	48		409
April 1st to 16th..	37	54	3	18	2	44	16		191
Total.	1,078	945	620	1,100	43	1,176	508		5,519

Miscellaneous Work

Months 1899	Cutting Weeds	City Yards	Washing Streets	Plumbing & Sewers	Street Signs		Miscellaneous		Total
					Material	Labor	Material	Labor	
April 18th to 30th.		\$25 50		\$152 68				\$ 13 50	\$ 191 68
May		52 50	\$221 21	175 89			\$ 1 00	4 75	458 38
June		48 75	262 50	171 60			43	17 44	540 72
July	\$156 50	57 75	240 00	164 04			2 00	8 01	628 90
August	306 29	52 50	224 25	191 52			8 43	29 01	774 00
September		50 75	258 50	164 80	\$ 18 63	\$ 7 00	1 64	04 46	569 78
October		52 50		240 20	514 18	290 06	2 72	40 37	1,140 65
November		50 75		164 22	490 85	278 25	61 27	61 67	1,047 01
December		49 00		137 16	286 25	142 08	21 90	45 25	631 64
January—1900.		47 50	27 50	104 85			40	12 50	192 75
February		50 75		108 81				15 75	175 31
March		52 50		198 25			5 25	8 50	264 50
April 1st to 16th		24 50		81 61			3 80	10 80	120 81
Totals	\$522 79	\$415 25	\$1,238 90	\$ 2,079 03	\$ 1,199 91	\$717 30	\$108 84	\$ 232 11	\$6,795 91

REPORT

OF THE

Superintendent of the Water Department, For Fiscal Year 1899.

Kansas City, Mo., May 1, 1900.

To the Honorable Board of Public Works:

GENTLEMEN:—I herewith submit report of operations of Water Department for Fiscal Year ending April 16th, 1900.

Respectfully,

D. W. LONGWELL,
Superintendent.

OFFICERS OF THE WATERWORKS DEPARTMENT.

Water Commissioners—GEO. S. GRAHAM, President.

GEO. P. HARDESTY,

M. V. WATSON,

B. T. WHIPPLE.

Secretary, R. M. GODFREY.

Superintendent, D. W. LONGWELL.

Chief Clerk—CHAS. E. RICKERT.

Engineer—WYNKOOP KIERSTED.

Assessor and Collector Water Rates—C. S. SQUIER.

Chief Clerk--J. B. LAWRENCE.

Engineer in Charge Turkey Creek Station—JOSEPH L. CHAPMAN.

Engineer in Charge Quindaro Station—JOHN F. SICKELS.

RECEIPTS AND EXPENDITURES FOR YEAR 1899.

	Expenditures	Receipts
Receipts		\$397,684.83
Balance on Hand April 17th		177,263.41
Operating Expenses	\$149,327.18	
Betterment	161,702.89	
Interest	137,992.50	
Cash Balance	125,925.67	
	\$574,948.24	\$574,948.24

PAY ROLLS AND VOUCHERS.

Department.	Pay Rolls.	Vouchers.	Total.
Superintendent, Engineer and office \$	7,479.16	\$ 641.83	\$ 8,120.99
Street Division	11,530.28	3,311.10	14,841.38
Inspection Division	12,893.88	1,364.73	14,258.61
Meter Division	6,729.81	1,290.00	8,019.81
Turkey Creek	21,285.04	19,591.56	40,876.60
Quindaro	15,978.67	18,825.93	34,804.60
Betterment	14,253.13	24,284.95	38,538.08
Miscellaneous	969.30	4,577.74	5,547.04
Assessor and Collector	10,516.90	2,215.50	12,732.40
Barn	2,154.00	2,792.71	4,946.71
Construction	3,272.42	1,740.46	5,012.88
Appropriations	19,107.84	104,056.97	123,164.81
Rebates and Refunds		113.35	113.35
	\$126,170.43	\$184,806.83	\$310,977.26

112 ANNUAL REPORT OF THE BOARD OF PUBLIC WORKS.

May 1, 1900.

D. W. LONGWELL.

Superintendent Water Department.

SIR :—I herewith submit my annual report of the Street Division of the Water Department, showing work of construction and repair for fiscal year ending April 16, 1900.

Respectfully,

J. S. CANNON.

Street Foreman.

Inventory of Material Used and Stock on Hand April 16, 1900, by Street Department.

Cast Iron Pipe.

On Hand				
Size	Received	Disposed of and Lost	Apr. 17th. 1899	Apr. 16th. 1900
			Lineal Feet	Lineal Feet
3-Inch		60	12	21
4 "	2,652	1,451	12	21
6 "	45,252	35,021	12	21
8 "	13,908	13,512	12	21
10 "	6,826	6,000	12	21
12 "	1,200	584	12	21
15 "			12	21
16 "		12	12	21
20 "			12	21
24 "			12	21
30 "	12		12	21

Extension of Water Mains by Ordinance.

[illegible]

Hydrants Set During Fiscal Year Ending April 16, 1900—Continued.

Location	Inch	Location	Inch
W. S. May, 165 ft. n. of 8th ...	5	Dunham and Walrond.....	4
N. W. 9th and Elmwood	5	Dunham and College	4
“ 8th and Elmwood.....	5	S. W. 10th and Mulberry.....	3
“ 7th and Elmwood.....	5	20th and College	4
W. S. Forest, bet. 81st and 82d.....	4	21st and College.....	4
“ Main, bet. 23d and 24th.....	4	Matthew and College.....	4
N. W. Main and 24th.....	4	22d and College	4
S. E. Elmwood and St. John.....	5	23d and College.....	4
“ St. John and Brighton.....	4	S. W. 19th and Walrond.....	4
S. S. St. John, 546 ft. w. of Brighton.....	4	“ 19th and College.....	4
N. E. St. John and Denver.....	5	S. S. 19th, 264 ft. n. of Indiana	4
N. S. Independence and Lydia.....	4	“ Cottage, 261 ft. w. of Woodland	4
S. W. Bellefontaine and 14th.....	4	S. W. Woodland and 21st	4
“ Bellefontaine and 15th	4	“ Woodland and 22d.....	4
W. S. Bellefontaine, 253 ft. s. of 12th.....	4	W. S. Bellevue, bet. 27th and 28th	4
S. W. 8th and Broadway.....	5	S. W. 27th and Bellevue.....	4
S. E. 23d and Woodland.....	4		

May 1, 1900.

D. W. LONGWELL,

Superintendent Water Department.

SIR :—I herewith submit my annual report of the Street Division of the Water Department, showing work of construction and repair for fiscal year ending April 16, 1900.

Respectfully,

J. S. CANNON,

Street Foreman.

Inventory of Material Used and Stock on Hand April 16, 1900, by Street Department.

Cast Iron Pipe.

Size	Recieved	Disposed of and Laid	On Hand	
			Apr. 17th, 1899	Apr. 16th. 1900
			Lineal Feet	Lineal Feet
3-Inch		60	182	72
4 "	2,652	2,481	2,040	2,208
6 "	45,252	55,021	12,571	2,772
8 "	13,908	13,512	1,428	1,824
10 "	6,306	6,000	192	588
12 "	4,200	984	60	3,336
15 "			12	12
18 "		12	72	60
20 "			60	60
24 "			48	48
30 "	12		24	36

Hydrants Set During Fiscal Year Ending April 16, 1900—Continued.

Location	Inch	Location	Inch
W. S. May, 165 ft. n. of 8th ...	5	Dunham and Walrond.....	4
N. W. 9th and Elmwood	5	Dunham and College	4
“ 8th and Elmwood.....	5	S. W. 10th and Mulberry.....	5
“ 7th and Elmwood.....	5	20th and College	4
W. S. Forest, bet. 31st and 32d.....	4	21st and College... ..	4
“ Main, bet. 23d and 24th.....	4	Matthew and College.....	4
N. W. Main and 24th.....	4	22d and College	4
S. E. Elmwood and St. John.....	5	23d and College... ..	4
“ St. John and Brighton.. ..	4	S. W. 19th and Walrond.....	4
S. S. St. John, 546 ft. w. of Brighton.....	4	“ 19th and College.. ..	4
N. E. St. John and Denver.....	5	S. S. 19th, 264 ft. n. of Indiana	4
N. S. Independence and Lydia.....	4	“ Cottage, 261 ft. w. of Woodland.....	4
S. W. Bellefontaine and 14th.....	4	S. W. Woodland and 21st	4
“ Bellefontaine and 15th	4	“ Woodland and 22d.....	4
W. S. Bellefontaine, 253 ft. s. of 12th.....	4	W. S. Bellevue, bet. 27th and 25th.....	4
S. W. 8th and Broadway.....	5	S. W. 27th and Bellevue.....	4
S. E. 23d and Woodland.....	4		

122 ANNUAL REPORT OF THE BOARD OF PUBLIC WORKS.

KANSAS CITY, Mo., May 1, 1900.

D. W. LONGWELL, Superintendent.

Below is a report of Inspection Department for the fiscal year ending April 16, 1900:

	NO. OF
Services turned on—regular	4920
Services turned on after being repaired	440
Services turned on for builders' use	670
Services turned on and off for elevator test	18
Services turned off account moved	1525
Services turned off by request	389
Services turned off for violation	75
Services turned off, unpaid	1180
Services turned off, burned	36
Services turned off, leak	487
Services turned off, builders finished	573
Examinations by building inspector	4801
Shortages found by building inspector	156
Violations found by building inspector	423
Premises re-rated	5208
Services examined to see if O. K	3228
Services examined to see if off	4182
Pipes in trenches inspected	2884
Small mains turned off for new connections	121
Statements of meter indicators taken	1101
Stop-boxes measured specially	119
Boxes found out of order	914
Notices given to repair boxes	359
Curb-cock keys captured	7
Services examined—special inspection	3600
Leaks found and notices given	2069
Blocks consumers notified before street is paved	232
Connections found outside of meter	9
Meters found out of order	21
By-pass valve examinations	118
By-pass valves sealed	17
Fire protection valves examined	660
Fire protection valves sealed	101
Corrections of maps	11
Bills presented	187
Miscellaneous trips	6439
Sprinkling violations	78
Service permits issued	2006
Service permits examinations	2803
Service permits rejections	724
Extension permits issued	2365
Extension permits examinations	2860
Extension permits rejections	316
Taps made	1550
Fountains examined	1034
Services repaired	309
Services disconnected	97
Fountains reset	7
Flush tanks examined	176
Small mains laid	5
Fire hydrants closed	25
Put in 75 feet of 4-inch sewer pipe at 23d and Vine, for fountain.	

Respectfully submitted,

WALTER R. WILSON, Chief Inspector.

124 ANNUAL REPORT OF THE BOARD OF PUBLIC WORKS

METERS REPAIRED.

1 1/2 inch Crown	188
3/4 " "	88
1 " "	86
1 1/2 " "	2
2 " "	19
3 " "	10
4 " "	4
6 " "	3-350
5/8 inch Hersey	149
3/4 " "	29
1 " "	8
1 1/2 " "	8
3 " "	1
4 " "	2-192
1 1/2 inch Trident	32
3/4 " "	2
1 " "	1
2 " "	1-36
5/8 inch Lambert	8
3/4 " "	2
1 " "	1-11

5/8 inch Worthington	6
3/4 " "	8
1 1/2 " "	8
2 " "	3-15
5/8 inch Pittsburg	11
3/4 " "	1
1 " "	3-15
1 1/2 inch Nash	10-10
1 1/2 inch Empire	1-1
1 1/2 inch Union	2
3/4 " "	2
1 " "	2-6
1 1/2 inch Thompson	6
1 " "	1-7
10 inch Gem	2-2
	645

METERS SOLD. -(2ND HAND.)

5/8 inch Hersey	1 @ \$ 8 00	\$ 8 00
3/4 " "	1 10 00	10 00
3/4 " "	2 15 00	30 00
1 " "	1 16 00	16 00
1 1/2 inch Crown	4 @ \$ 8 00	\$ 32 00
1 1/2 " "	2 10 00	20 00
3/4 " "	7 15 00	105 00

3/4 inch Crown	2 @ \$12 00	24 00
1 " "	3 20 00	\$60 00
1 " "	1 17 50	17 50
1 " "	2 16 00	32 00
2 " "	1 45 00	45 00
5/8 inch Thompson	1 8 00	8 00
		\$407 50

METERS IN STOCK. -(2ND HAND.)

5/8 inch Union	1
3/4 inch Lambert	1
3/4 inch Hersey	1
3/4 inch Crown	7
1 inch Crown	3
1 inch Thompson	1

1 inch Hersey	1
2 inch Crown	2
3 " "	2
4 " "	1
	20

METERS IN SERVICE.

1 1/2 inch Crown	1,509
3/4 " "	514
1 " "	182
1 1/2 " "	58
2 " "	58
3 " "	53
4 " "	44
6 " "	3-2,421
5/8 inch Hersey	1,033
3/4 " "	124
1 " "	49
1 1/2 " "	15
2 " "	16
3 " "	15
4 " "	9
4 " " Torrent	4-1,265
1 1/2 inch Trident	262
3/4 " "	18
1 " "	7
1 1/2 " "	1
6 " "	1-289
1 1/2 inch Nash	175
3/4 " "	12
1 " "	4
2 " "	1-192
5/8 inch Pittsburg	160
3/4 " "	13
1 " "	3
1 1/2 " "	3-179

5/8 inch Lambert	147
3/4 " "	13
1 " "	4-164
2 inch Gem	1
3 " "	3
6 " "	2
10 " "	2-8
5/8 inch Worthington	21
3/4 " "	10
1 " "	7
1 1/2 " "	12
2 " "	9
3 " "	4
4 " "	3
6 " "	1-67
5/8 inch Thomson	27
3/4 " "	6
1 " "	2-35
1 1/2 inch Union	3
3/4 " "	2
1 " "	1
3 " "	1-7
1 1/2 inch Empire	14
3/4 " "	13-27
	46 54

J. G. ANDERSON, Foreman,
S. S. MOREY, Clerk.

Brick

	Cost	Average Cost per Sq. Yard
72	37,856 88	82.04
80	40,300 02	1.677
88	57,857 74	1.040
90	105,184 03	1.617
90	61,914 70	1.346
40	48,719 25	1.707
50	117,224 40	1.421
60	117,424 10	1.307
80	112,500 63	1.477
	125,000 64	1.50
80	91,628 06	1.57

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Statement of Streets Paved with Stone Blocks During Fiscal Year Ending April 15, 1901.

Street	From	To	Specifications.				Amount	No. of Tax Bills		
			New Stone Blocks		Repairing Stone Blocks				Concrete	
			Square Yards	Price per sq Yard	Square Yards	Price per sq Yard				Cubic Yards	Price per sq Yard
Mulberry St.	Union ave	Eleventh st.	786.00	\$1 95	2,150.00	\$ 50	350.80	\$3 25	\$3 956 08	8

1 Contract

Statement of Streets Paved with Macadam During Fiscal Year Ending April 15, 1901

Street	From	To	Material Used—Inches								Accepted	Lineal Feet	Square Yards	Price per Square Yard	No. of Tax Bills Issued	Amount
			Crushed Granite	Screenings	Gravel	Limestone Screenings	Crushed Limestone	Broken Limestone	Beth. Falls Limestone	Gravel						
Benton blvd.	Independence blvd.	Fifteenth st.	Park Board specifications									4,140	18,981.80	\$ 1 83	83	\$31,736 69
Benton blvd.	Fifteenth st.	Twenty-fourth st.	"	"	"	"	"	"	"	"		4,050	20,096.21	1 78	203	35,771 25
Benton blvd.	Twenty-fourth st.	Thirty-first st.	"	"	"	"	"	"	"	"		4,790	21,900.60	1 74 1/2	95	89,227 02
Linwood blvd.	Troost ave.	Michigan ave.	"	"	"	"	"	"	"	"	Jan. 2, 1901	2,000	18,209.30	1 54	79	20,942 82
The Paseo.	Linwood blvd.	100 ft s of n line sec 21 T. 49. R. 38	"	"	"	"	"	"	"	"		3,150	9,307.60	1 51	67	13,908 44
5 Contracts	3.38 Miles											17,830	88,401.51		526	\$142,090 70

Statement of Artificial Stone Combined Curb and Gutter Constructed During Fiscal Year Ending April 15, 1901.

Street	Side	From	To	Authorized by	Public Contract		No. of Tax Bills
					Curb and Gutter	Amount	
					Lineal Feet	Price per Foot	
Linwood blvd.....	Both	Troost ave	Michigan ave. ...	Park Board	6,045.65	\$.98	77
The Paseo.....	"	Linwood blvd ..	100 ft. so. of n. line Sec. 21, Twp. 49, Range 88.....		4,219.31	.964	68
2 Contracts.		1.95 Miles.			10,314.96	\$ 10.041.13	145

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Continued.

District No. 71, Division No. 1. Ordinance No. 15878.						District No. 147. Ordinance No. 15708.					Total Amounts
at	Lineal Feet	Cubic Yards	No.	Rate	Amount	Lineal Feet	Cubic Yards	No.	Rate	Amount	
											\$ 6,288 58
											7,193 60
											6,618 45
											1,302 60
											483 10
											528 85
											2,514 87
											1,212 38
											2,17 80
											1,318 20
											2,877 97
											1,987 38
											1,539 20
											5,802 68
											506 60
						1,319.80			\$.93	\$ 1,227 41	1,227 41
						1,337.90			.71 $\frac{3}{4}$	959 94	1,414 42
						2,616.20			.70 $\frac{1}{2}$	1,844 42	5 971 75
											1,231 28
16	600.90			\$.70	\$ 426 93	2,093.60			.668	1,398 52	15,558 15
											60 88
											4 50
											2 00
						642.70			.47	302 06	802 06
						773.80			.43	332 78	1,374 82
10			2	30 00	60 00			16	29 75	476 00	3,827 10
											6,733 80
10	4,000			25 00	100 00	33,945	1,575		2 35	3,701 25	45,195 52
									20 00	678 90	8,789 62
								20	22 50	450 00	1,688 00
10								4	65 00	260 00	2,055 00
10						827.50			.16	132 40	928 15
											118 72
								9	5 50	49 50	49 50
											80 00
											250 00
								1		29 60	29 60
16					\$ 586 98					\$ 11,842 73	\$ 184,148 07

total feet of Sewer. 9.95 miles.

Number of Tax Bills issued, 5,228.

Statement of Natural Stone Curbing Under Contract at Close of Fiscal Year Ending April 15, 1901.

Street	Side	From	To	Thickness Inches	Approximate Estimate			
					Reset, etc		New Curb	
					Lineal Feet	Price Per Foot	Lineal Feet	Price Per Foot
Michigan ave.....	Both	Howard st.....	Twenty-fifth st...	5	25	\$.15	775	\$.473 1/4
Mercier st	"	Twenty-third.....	Twenty-fifth s...	5	25	.07	1,928	.428
Thirty-eighth st..	"	Broadway	Roanoke blvd ..	5	80	.19	4 258	.429
Thirtieth st	"	Woodland ave.....	Indiana ave	5	.....	.....	9,570	.483 1/4
Broadway	"	Thirty-fifth st....	Thirty-eighth st..	5	200	.05	2,700	.42
Fourth st	"	Grand ave.....	Holmes st	5	100	.08	1,961	.473 1/4
Highland ave.....	"	Thirty-first st....	Linwood blvd ..	5	100	.05	1 080	.42 1/4
Twenty-sixth st..	"	Prospect ave.....	Benton blvd.....	5	100	.08	1,428	.42 1/4
Thirty-eighth st..	"	Warwick blvd.....	Broadway	5	2,825	.18	450	.54
9 Contracts		5.21 Miles			3,405		24,143	
								\$11,569 10

Statement of Artificial Stone Combined Curb and Gutter Under Contract at Close of Fiscal Year Ending April 15, 1901.

Street	Side	From	To	Approximate Estimate		
				Lineal Feet	Price Per Foot	Amount
Campbell st.....	Both	Armour blvd .....	..... s line Hampden pl	2,820	\$.74 1/4	\$1,728 40
Armour blvd.....	"	Cherry st	Troost ave.....	4 000	.964	3,856 00
Armour blvd.....	"	Broadway	McGee st.....	8,890	.964	8,537 96
3 Contracts		1.84 Miles		9,710		\$8,822 36

Statement of Artificial Stone Curbing Under Contract at Close of Fiscal Year Ending April 15, 1901.

Street	Side	From	To	Thickness inches	Approximate Estimate				Total Cost
					Reset, etc Linear Feet	New Curb Linear Feet	$\frac{5}{11}$	$\frac{5}{11}$	
Main	Both	Westport ave.	Fortleth st.	5	...	650	...	\$.149	\$ 200 25
Michigan ave.	"	Thirty-first st.	Thirty-fifth st.	5	200	4,620	...	.441	2,156 35
Askew ave.	"	Twelfth st.	Fifteenth st.	5	300	2,311	...	.117	100 68
Cliff	"	Holly st.	Mereler st.	5	40	700	...	.14	300 40
Thompson av.	"	Gladstone blvd.	Walrond ave.	5	150	400	...	.14	212 70
Thirty-fourth	"	Troost ave.	Campbell st.	5	150	350	...	.44	247 46
Twenty-fifth	"	Brooklyn ave.	Indiana ave.	5	30	6,152	...	.418	2,574 23
Twenty-first	"	Kansas ave.	College ave.	6	...	2,025	...	.434	901 76
Highland ave.	"	Thirty-third st.	Thirty-fifth st.	5	150	2,250	...	.114	931 57
Myrtle ave.	"	Fifteenth st.	Nineteenth st.	5	150	3,200	...	.417	1,341 90
Twenty-fifth	"	Indiana ave.	Cleveland ave.	5	100	1,054	...	.50	977 10
Howard	"	Grove st.	Brooklyn ave.	5	...	4,100	...	.541	2,267 50
12 Contracts		5.75 Miles			1,270	20,001			18,076 20

Statement of Streets Paved with Cedar Blocks at Close of Fiscal Year Ending April 15, 1901.

Street	From	To	Foundation Specifications			Inches Board up	Inches Hoar down	Inches Concrete	Maintenance Years	Accepted	Linear Feet	Square Yards	Contractor
			Inches up	Inches Hoar down	Inches Concrete								
Main	2nd st.	3d st.	1		9			9	May	16, 1884	300	1,200	James McGonigle
Missouri ave	Delaware st	Walnut st.	1		8			8	Aug.	5, 1885	601	1,762	Geo. T. Baer
Oak	4th st.	11th st.	3	1					Dec.	12, 1889	1,056	4,000	J. B. Smith & Co
Penna. ave	S. W. Blvd.	Belt Line R.	1		6			6	Dec.	21, 1890	603	2,046.00	"
Seventh	Grand ave.	Oak st.	3	1					July	16, 1888	460	1,123	Andrew Jaicks
State	9th st.	St. Louis ave	3	2					Dec.	11, 1888	901	1,374	Geo. J. Baer
Trout ave	Indp. ave.	6th st.	1		6			6	June	9, 1888	482	1,551	Andrew Jaicks
Vine	6th st.	8th st.	1		6			6	Nov	16, 1887	462	1,544.00	I. Robinson
Wabash ave	Pine st.	Dora ave	3	1					Nov.	1, 1890	306	1,000	J. B. Smith & Co
Walrond ave	St. John ave	Norledge Pl.	3	1					Sept.	21, 1896	500	2,800	A. J. McRean & Co
Total Cedar Block pavement laid										279,932 linear feet, 53.02 miles.			
Total cedar Block pavement taken up										277,804		51.88	
Total Cedar Block pavement April 15, 1901...										6,658		1.14	

Statement of Streets Paved With Stone Blocks at Close of Fiscal Year Ending April 15, 1901.

Street	From	To	Foundation		Maintenance		Lineal Feet	Square Yards	Price Per Sq Yd	Contractor	Remarks
			Conc. In	Sand In	Accepted	Expires					
Bluff	5th st.	Bluff st bridge	9		1893		755	4,577	\$2 50	George Todd	Repaved & Repaired
Eighth	Delaware st.	Grand ave	6	1½	Jan. 7, 1890		573	2,126.40	3 05	Kepley & A.	
Eleventh	Santa Fe st.	w end 11th st	6		Sept. 24, 1898	5	1,118	3,976.10	2 90	Parker W. Co.	Repaved & Repaired
Fifth	Broadway	Bluff st.	9	9	Jan. 8, 1883		775	4,259	3 50	B. F. Camp.	
Grand ave	3rd st.	Front st.	8	3	Aug. 4, 1888		921	4,588.87	3 85	E. Saxton.	
Mulberry	Union ave.	13th st.	9	9	Sept. 9, 1884		976	8,555	3 89½	Comstock & H	
Mill	4th st.	8th st.		8	June 25, 1891	5	215	605.50	2 549	C. L. Powell	
Ninth	Main st.	Grand ave.	6		Mch. 26, 1895		571	979.10	5 208	J. D. Hackett.	
Santa Fe	Union ave.	12th st.	6	1½	June 4, 1889		600	2,653	3 44	G. J. Baer.	
Sixth	Main st.	Walnut st.	6	2½	Dec. 14, 1895	5	285	982.70	2 77	H. S. Trestall	
Seventh	Main st.	Walnut st.	6	2½	Oct. 15, 1895	5	279	989.80	2 77		
Twelfth	Liberty st.	Bell st.	6	1½	Dec. 16, 1890	5	1,167	2,700	2 99	Mulvane & K.	
Tenth	Main st.	Grand ave.	6	1	Jan. 31, 1891	5	494	1,240	2 80	J. McGonegal.	
Union ave	St Louis ave.	Hickory st.		2	Mar. 27, 1894		2,250	9,937.50	63	F. G. Trestall	Reconstructed
Wyandotte	2nd st.	4th st.	6	2	Jan. 6, 1892		569	2,449.20	2 579	C. L. Powell.	
Walnut	4th st.	5th st.	6	2½	May 12, 1894	5	298	1,559	2 47	J. O'Donnell.	
Total stone block paving to date 2.24 miles							11,829	47,458.17			

TWELFTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF STREETS

For the Fiscal Year Ending April 17, 1901.

To the Honorable Board of Public Works, Kansas City, Mo.

GENTLEMEN:—I herewith submit to you a report of the operations of the Street Department for the year ending April 17, 1901, showing by tabulated statements how and for what purposes the funds apportioned to the Department have been used.

Respectfully yours,

T. J. PENDERGAST,

Superintendent of Streets.

SUMMARY.

Pay Rolls and Accounts for Fiscal Year Ending April 17, 1901.

Months 1900	Pay Rolls	Bills Paid	Totals
April 16th to 30th	\$ 2,045 85	\$ 196 24	\$ 2,242 09
May	5,523 16	901 15	6,424 31
June	7,810 56	1 634 13	9,444 69
July	7,395 21	681 89	8,077 10
August	8,000 68	712 61	8,713 29
September	7,571 96	557 50	8,129 46
October	6,764 22	1 550 75	8,314 97
November	5,909 92	701 75	6,611 67
December	6,211 88	706 90	6,918 78
January, 1901	3,172 11	356 94	3,529 05
February	4,567 85	522 80	5,090 65
March	4,151 06	147 56	4,298 62
April 1st to 17th	2,953 14	413 52	3,366 66
Totals	\$ 72,077 60	\$ 9,083 74	\$ 81,161 34

Pay Rolls of Streets and Alleys Department for Fiscal Year Ending April 17, 1901.

Months 1900	Superintendent	Clerks	Inspectors	Masons	Carpenters	Pavers	Foremen	Teams	Labor	Bills	Totals
April 16th to 30th	\$ 51 54	\$ 72 50	\$ 72 50	\$ 59 60	\$ 10 00	\$ 30 00	\$ 96 60	\$ 538 04	\$ 1,095 07	\$ 196 24	\$ 2,242 09
May	106 06	107 10	150 00	132 50		50 12	240 41	1,653 27	3,013 40	901 15	6,424 81
June	165 06	90 00	150 00	104 35	37 18	67 06	406 30	2,206 97	1,508 04	1,634 13	6,444 69
July	106 06	90 00	150 00	101 75	63 75	57 11	430 70	2,032 99	4,248 25	681 89	8,077 10
August	136 06	90 00	150 00	104 50	72 18	82 49	447 98	2,339 06	4,547 81	712 61	9,162 29
September	106 06	90 00	150 00	123 50	69 56	69 00	412 58	2,208 53	4,285 31	667 50	8,578 46
October	106 06	90 00	150 00	111 65	57 55	19 50	315 74	1,838 80	8,984 29	1,560 75	8,314 97
November	106 06	90 00	150 00	106 70	69 93	63 92	329 21	1,569 24	8,373 26	701 75	8,611 67
December	106 06	90 00	150 00	117 15	78 11	74 60	429 35	1,810 78	8,295 23	706 90	8,918 74
January 1901	106 06	90 00	150 00	4 10	5 00	4 12	304 27	742 23	1,705 48	856 94	8,529 05
February	106 06	90 00	150 00	11 00			280 33	1,511 41	2,319 42	522 40	5,000 65
March	106 06	90 00	150 00	35 50	20 62		340 12	186 39	2,397 77	147 56	4,208 62
April 1st to 17th	83 33	15 00	75 00	41 80	21 65		263 48	816 55	1,573 39	418 52	3,006 66
Totals	\$ 1,967 13	\$ 1,134 00	\$ 1,797 50	\$ 1,018 50	\$ 816 59	\$ 514 01	\$ 4,185 37	\$ 20,231 20	\$ 40,457 61	\$ 9,103 74	\$ 82,261 84

Pay Rolls of Streets and Alleys Department for Fiscal Year Ending April 17, 1901.

Months 1900	Superintendent	Clerks	Inspectors	Masons	Carpenters	Pavers	Foremen	Teams	Labor	Bills	Totals
April 16th to 30th	\$ 81 54	\$ 72 50	\$ 72 50	\$ 50 60	\$ 10 00	\$ 30 00	\$ 96 00	\$ 538 04	\$ 1,095 07	\$ 196 24	\$ 2,242 09
May	166 66	117 10	150 00	132 20		50 12	240 41	1,653 27	3,013 40	901 15	6,424 81
June	166 66	90 00	150 00	108 35	37 18	67 06	496 30	2,206 97	1,588 04	1,634 13	9,444 69
July	166 66	90 00	150 00	101 75	53 75	57 11	439 70	2,032 99	4,248 25	681 89	8,077 10
August	136 66	90 00	150 00	104 50	72 18	82 49	447 96	2,339 06	4,547 81	712 61	9,162 39
September	166 66	90 00	150 00	123 20	66 56	69 09	412 58	2,298 53	4,285 34	657 50	8,578 46
October	166 66	90 00	150 00	111 65	57 58	49 50	315 74	1,838 80	3,984 29	1,550 75	8,314 97
November	166 66	90 00	150 00	106 70	60 93	63 92	329 21	1,569 24	3,373 26	701 75	8,611 67
December	166 66	90 00	150 00	117 15	78 11	74 60	429 35	1,810 78	3,295 23	796 90	8,918 78
January 1901	166 66	90 00	150 00	4 40	5 00	4 12	304 27	742 23	1,705 48	856 04	3,529 03
February	166 66	90 00	150 00	11 00			280 33	1,511 44	2,349 42	522 80	5,090 65
March	166 66	90 00	150 00	35 20	20 62		360 42	986 39	2,397 77	147 56	4,298 62
April 1st to 17th	83 33	45 00	75 00	41 80	24 68		263 48	816 55	1,573 30	418 52	3,366 68
Totals.....	\$ 1,997 13	\$ 1,134 60	\$ 1,797 50	\$ 1,018 50	\$ 816 59	\$ 518 01	\$ 4,485 37	\$ 20,234 29	\$ 40,457 61	\$ 9,083 74	\$ 82,261 34

Total Permits Issued for Excavations from April 16, 1900, to April 17, 1901.

Months 1900	Water By Plumbers		Sewer By Plumbers		Gas K.C.Mo.G.Co		Poles	Subway	Miscellaneous	Totals
	Repairs	Service	Repairs	Service	Main	Service				
April 16th to 30th....	32	4	3	1	3	3	5	1	1	26
May.....	1	1	1	1	1	1	1	1	1	6
June.....	1	1	1	1	1	1	1	1	1	6
July.....	1	1	1	1	1	1	1	1	1	6
August.....	1	1	1	1	1	1	1	1	1	6
September.....	1	1	1	1	1	1	1	1	1	6
October.....	1	1	1	1	1	1	1	1	1	6
November.....	1	1	1	1	1	1	1	1	1	6
December.....	1	1	1	1	1	1	1	1	1	6
January, 1901.....	1	1	1	1	1	1	1	1	1	6
February.....	1	1	1	1	1	1	1	1	1	6
March.....	1	1	1	1	1	1	1	1	1	6
April 1st to 17th.....	4	3	2	1	4	1	5	1	1	15
Totals.....	1103	760	76	948	4	1218	307	21	32	5377

TWELFTH ANNUAL REPORT
OF THE
SUPERINTENDENT OF BUILDINGS

For the Fiscal Year Ending April 15, 1901.

KANSAS CITY, MO., April 15, 1901.

To the Honorable Board of Public Works, Kansas City, Mo.

GENTLEMEN:—It is my pleasure to present you herewith the annual report of the operations of the Department of Buildings for the fiscal year beginning at noon, April 16, 1900, and ending at noon, April 15, 1901.

Respectfully submitted,

M. McTIERNAN,

Superintendent of Buildings.

Summary and Comparison of Building Permits Issued, by Months.

Months 1900	No. of Permits		Front Feet		Estimated Cost		Fees		
	April 17, '99 to April 16, '00	April 16, '00 to April 15, '01	April 17, '99 to April 16, '00	April 16, '00 to April 15, '01	April 17, 1899 to April 16, 1900	April 16, 1900 to April 15, 1901	April 17, '99 to April 16, '00	April 16, '00 to April 15, '01	April 16, '00 to April 15, '01
April 16th, noon, to April 30th.....	223	212	1,758	2,013	\$ 298,270 00	\$ 264,580 00	\$	\$	192 00
May	451	359	3,762	3,131	433,920 00	359,280 00	218 50	281 85	281 85
June	333	333	3,735	3,176	362,180 00	547,800 00	285 65	396 85	396 85
July	373	314	3,625	3,149	671,570 00	482,060 00	442 40	352 65	352 65
August.....	340	346	3,270	3,093	358,840 00	363,020 00	288 80	278 10	278 10
September	852	321	2,625	3,463	865,800 00	392,810 00	311 60	279 45	279 45
October	106	398	1,099	4,078	322,170 00	452,510 00	296 85	343 80	343 80
November	209	275	1,842	2,752	296,530 00	817,925 00	294 15	240 70	240 70
December	149	248	1,646	2,505	211,210 00	238,710 00	153 55	190 35	190 35
January, 1901.....	129	242	1,481	2,235	191,580 00	193,840 00	129 65	169 75	169 75
February	105	193	1,009	2,677	131,150 00	513,430 00	93 20	301 40	301 40
March	310	437	3,143	4,921	814,100 00	652,540 00	240 58	440 35	440 35
April 1st to noon, April 15th.....	164	181	1,499	2,061	218,300 00	244,420 00	157 75	164 45	164 45
Totals.....	3,604	3,880	30,194	39,194	\$ 4,205,620 00	\$ 5,022,955 00	\$ 3,203 95	\$ 3,582 00	\$ 3,582 00

Summary and Comparison of Miscellaneous Permits Issued, by Months.

Months 1900	Fees	Date		Date	
		April 17, '99 to April 16, '00	April 16, '00 to April 15, '01	April 17, '99 to April 16, '00	April 16, '00 to April 15, '01
		No of Permits	Estimated Cost	No of Permits	Estimated Cost
April 16th to 30th.....	\$ 71 50	155	\$52,670 00	189	\$ 27,960 00
May.....	123 50	298	83,920 00	224	58,980 00
June.....	127 90	231	80,590 00	213	89,230 00
July.....	127 75	255	103,570 00	231	80,710 00
August.....	125 65	244	133,310 00	226	66,720 00
September.....	102 85	257	106,500 00	196	49,090 00
October.....	135 00	309	112,570 00	248	50,310 00
November.....	98 75	199	65,730 00	181	34,425 00
December.....	90 00	104	35,610 00	146	45,150 00
January, 1901.....	88 65	84	41,280 00	157	36,330 00
February.....	51 50	64	48,550 00	100	24,080 00
March.....	130 85	181	43,300 00	245	59,140 00
April 1st to 15th.....	54 25	112	81,000 00	97	30,470 00
	\$1,338 15	2,493	\$938,620 00	2,403	\$652,805 00

FOURTH ANNUAL REPORT
OF THE
SUPERINTENDENT
OF THE
WATER DEPARTMENT

For the Fiscal Year Ending April 15, 1901.

KANSAS CITY, MO., April 15, 1901.

To the Honorable Board of Public Works, Kansas City, Mo.

GENTLEMEN :—I herewith submit to you the annual report of the operations of the Water Department for the fiscal year ending April 15, 1901.

Respectfully,

D. W. LONGWELL,

Superintendent.

Statement of Receipts and Expenditures of Water Department From April 16, 1900,
to April 15, 1901.

	Expenditures	Receipts
Balance on Hand April 16th, 1900		\$125,925 67
Receipts Fiscal Year 1900 1901		428,209 78
Operating Departments	\$137,255 09	
Assessor and Collector	13,631 63	
Betterment	\$37,313 62	
Appropriations	99,761 29	
Interest	137,790 00	
Balance on Hand April 15th, 1901	165,697 44	
	\$554,135 45	\$554,135 45

Approximate Pounds Pressure.

Due to columns of water from 50 to 200 feet in height: also the number of gallons of water that will be delivered per minute, and the height in feet to which it will be discharged through nozzles from five-eighths to one and one-fourth inches in diameter, under heads from 50 to 200 feet in height, or the corresponding pounds pressure.

Height in feet of column of water. ...	50	60	70	80	90	100	120	140	160	180	200
Pounds pressure due to same.....	22	27	31	36	40	44	54	62	71	80	89
$\frac{5}{8}$ inch nozzle.											
Number of gallons will deliver per minute	50	55	60	63	67	72	78	85	87	93	101
Height in feet will discharge.....	44	51	58	64	70	75	84	91	96	99	100
$\frac{3}{4}$ inch nozzle.											
Number of gallons will deliver per minute	73	79	86	92	98	103	113	122	127	137	146
Height in feet will discharge.....	45	52	60	67	73	79	90	99	106	112	116
$\frac{7}{8}$ inch nozzle.											
Number of gallons will deliver per minute	101	109	118	127	133	140	156	161	173	187	199
Height in feet will discharge.....	46	54	61	70	75	82	94	105	114	122	129
1 inch nozzle.											
Number of gallons will deliver per minute	133	142	155	159	172	183	201	217	226	244	260
Height in feet will discharge.....	46	55	62	70	77	84	97	109	120	129	137
$1\frac{1}{4}$ inch nozzle.											
Number of gallons will deliver per minute	203	224	241	258	272	288	316	341	353	380	407
Height in feet will discharge..	47	56	64	72	81	87	102	116	128	139	150

Friction Loss in Pound Pressure.

For each 100 feet of length in 4-inch and 6-inch clean cast iron pipes discharging given quantities of water per minute.

Gallons per min.	4-inch	6-inch
50.....	0.09	....
100.....	0.33	0.05
150.....	0.69	0.10
200.....	1.22	0.17
250.....	1.89	0.26
300.....	2.66	0.37
350.....	3.65	0.50
400.....	4.73	0.66
450.....	6.01	0.81
500.....	7.43	0.96
750.....	....	2.21
1000.....	....	3.88
1250.....	....	....

Comparison of Pumpings, Years 1899 and 1900.

Turkey Creek.

Year	Gallons		Coal		Ashes	
	Total	Av Gals per Day	Pounds	Av Lbs per Day	Pounds	Av Lbs per Day
1899.....	3,179,939.97	9,511.137	21,218,509	58,215	4,025,130	13,257
1900.....	3,051,025.241	9,165.973	21,807,507	59,963	4,870,230	13,313

Quindaro.

Year	To Basin		To City		Coal		Alum	
	Total Gals	Av Gals per Day	Total Gals	Av Gals per Day	Pounds	Av Lbs per Day	Pounds	Av Lbs per Day
1899.....	4,576,632.925	12,538.227	3,834,940.556	10,589.561	11,741,810	32,169	458,544	1,256
1900.....	4,305,911.133	11,797.178	3,651,273.845	10,113.027	9,289,855	25,449	509,115	1,641

Report of Work Done by the Street Division of the Water Department from April 16, 1900, to April 15, 1901.

KANSAS CITY, MO., July 19, 1901.

D. W. LONGWELL, Supt.,

Kansas City, Mo.

SIR:—Herewith I submit a report of work performed and material used in Street Division of Water Department for the fiscal year ending April 15, 1901.

Respectfully,
J. S. CANNON, Street Foreman.

Months 1900	Hydrants		Valves		Mains Laid—Miles		Pipe Laid—Miles		Loads Dirt												
	Moved	and Oiled	Repaired	New	Repacked	New	Repaired	Valve Covers Not		Cubic Feet Excavation for Pipe	Cubic Feet Excavation for other than Pipe	Lead Laid	Repacked	New	4-in.	6-in.	8-in.	10-in.	12-in.	Pipe Laid—Miles	Loads Dirt
April 16 to 30	40	4	4	7	54	2	2	10	1,400	1,300	5	...	20	...	...	...	...	...	...	1,025	42
May	60	12	4	14	49	5	2	35	45,040	1,300	...	...	62	...	...	...	...	...	...	475	29
June	...	...	...	...	29	3	...	52	46,700	1,400	...	...	86	...	...	...	...	...	...	880	32
July	16	16	16	20	29	15	3	3	87,720	1,400	...	...	97	...	...	...	...	...	...	1,435	42
August	...	...	...	...	24	8	...	32	86,480	2,000	...	...	108	...	...	...	...	...	...	...	31
September	4	19	...	19	21	10	...	39	75,020	3,400	...	...	24	...	...	...	...	...	...	...	20
October	18	2	...	16	16	11	...	22	78,000	2,000	...	...	...	...	...	...	...	...	...	...	43
November	31	15	...	3	10	10	...	11	58,480	900	...	...	...	...	...	...	...	...	...	...	37
December	43	13	...	19	19	12	...	15	109,610	700	...	...	...	...	...	...	...	...	...	...	106
January—1901	42	2	...	2	4	2	...	12	63,920	3,400	...	...	...	...	...	...	...	...	...	...	21
February	20	14	...	8	31	1	...	7	7,020	200	...	...	...	...	...	...	...	...	...	...	54
March	4	6	...	6	43	20	...	2	82,540	1,000	...	...	...	...	...	...	...	...	...	...	20
April 1 to 15	...	...	...	...	...	...	...	...	14,980	400	...	...	...	...	...	...	...	...	...	...	39
Totals.....	49	218	151	9,072	319	101	18	239	715,640	21,620	40	2,760	48,949	13,350	2,121	5,700	5,403	494	451		

Valves, Hydrants and Specials on Hand April 15, 1901.—Continued.

HYDRANTS				VALVES			
Received	Set	On Hand Apr.16, 1900	On Hand Apr 15, 1901	Received	Set	On Hand Apr.16, 1900	On Hand Apr.15, 1901
157	151	29	85	98	101	137	129

Inventory of Miscellaneous Stock on Hand April 15, 1901.

Articles	No.	Articles	No.
Syphons	2	Sets calking, cutting and pipe	
Block and tackle sets.....	3	laying tools....	5
Derricks	3	Wells light.	1
Shovels	63	Hemp packing.....	441
Picks.	88	Lead	30,438 lbs
Valve keys.....	14	Smith tapping machines....	2
Sets hyd'nt & valve rep'r outfits.	3		

Mains Laid, April 16, 1900, to April 15, 1901.

Ordinance No.	Location	Length of Line					Valves			Hydrants			Total	Cost of Line	Average Cost per Foot
		4 in	6 in	8 in	10 in	12 in	10 in	12 in	16 in	4 in	6 in	8 in			
121681	Euclid ave., 29th to 40th	98	606										672	\$ 471.65	70
13601	25th st. Grand to McCoy	12				1,376			1				1,376	8,089.40	2,068
13605	McCoy ave., 20th to 25d		48			1,388							1,416	2,922.24	2,068
13677	Washington st., 7th to 10th		86	1,128	60								1,274	1,992.45	1,492
13678	25th st., Charlotte to Tracy	12	60			1,388							1,460	8,824.98	1,953
13679	Charlotte st., Howard to 25th	12				458							462	1,307.58	1,775
13680	25d st., McCoy to Charlotte	12				462							462	1,307.58	2,068
13683	Madison ave., 17th to 21st	12	2,040										2,052	1,884.76	1,900
14084	Central ave., 19th to 18th	24	684										708	884.10	1,100
14085	Locust st., 26th to 17 1/2 ft. north		240	708									240	305.30	1,100
14086	Cherry st., 27th to 17 1/2 ft. n. of 26th	12											240	884.10	1,100
14087	Joekman ave., indep. to Smart		36			1,808								1,890.70	1,81
14153	Myrtle ave., 15th to 18th	86	1,404											1,890.70	1,81
14154	Holly st., 42d to 43d	24	792											1,890.70	1,81
14155	Quincy ave., St. John to Harris	36	1,704											1,890.70	1,81
14156	Mad st., Westport to Holly	36	2,706											1,890.70	1,81
14157	Deliver ave., St. John to Harris	24	1,308											1,890.70	1,81
14157	Bright ave., St. John to Harris	24	1,398											1,890.70	1,81
14278	Montgall ave., 25th to 27th	12	1,204											1,890.70	1,81
14278	Kensington av., indep. to Smart	24	1,832											1,890.70	1,81
14278	Myrtle ave., 16th to 19th	12	588											1,890.70	1,81
14278	Myrtle ave., 16th to 19th	12	2,288											1,890.70	1,81
14508	Woodland ave., 23d to 28th	24	72	2,856										3,458.11	42
14508	Woodland ave., 23d to 28th	24	1,404											2,718.30	1,04
14508	Woodland ave., 28th to 30th			1,282										1,483.06	1,04
14907	Truost ave., 39th to 41st		48											1,620.44	1,87
14907	Walnut ave., 39th to 39th	88	1,960											1,766.58	80
14907	Walnut ave., 39th to 39th	88	48											271.79	80
14980	38th st., Bell to State Line		912											577.08	80
14991	Baltimore ave., 35th to 39th		720											761.54	80
14991	Wyandot st., S.W. by. to Millw'k		816											761.54	80
14995	Wyandot st., S.W. by. to Millw'k		482											761.54	80
14995	Morrill ave., Bates to Ankew		482											761.54	80

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METERS IN STOCK.—SECOND HAND.

3/4 inch Crown.....	2	2 inch Crown.....	8
1 " ".....	1	3 " ".....	1
1 " Thompson.....	1	4 " ".....	1
1 " Worthington.....	1		
1 1/2 " Crown.....	1		11

METERS REPAIRED.

Crown.....	289	Empire.....	1
Hersey, rotary.....	158	Union.....	8
Hersey, Disc.....	27	Columbia.....	4
Hersey, Torrent.....	2	Thompson.....	6
Trident.....	37	Gem.....	1
Lambert.....	15		600
Worthington.....	14	Indicators.....	8
Pittsburg.....	22		
Nash.....	16		

Amount charged for labor	
To city.....	\$1,024 50
To plumbers and consumers.....	3,888 58
	<u>\$4,913 08</u>
Amount charged for material	
To city.....	\$ 488 25
To plumbers and consumers.....	1,309 48
	<u>\$1,797 73</u>
For meters sold (2nd hand).....	\$324 00
For meters sold (new).....	220 00
	<u>\$544 00</u>

Respectfully yours,
J. G. ANDERSON,
Foreman.

Location of Fire Hydrants.

S. W. Washington and 8th.	S. W. Quincy and Scarritt.
S. S. Washington and 8th.	N. W. Quincy and St. John.
N. W. Washington and 8th.	S. W. Lydia and Helst.
S. W. Washington and 9th.	" Lydia and 33d.
N. W. Cherry and 20th.	" Lydia and 84th.
W. S. Montgall, bet. 25th and 26th.	N. W. Lydia and 35th.
N. W. Montgall and 26th.	" Central and 45th.
W. S. Montgall, bet. 26th and 27th.	S. W. Central and LaSalle.
N. W. Montgall and 27th.	" Twenty-third and Highland.
S. W. Euclid and 29th.	" Twenty-fourth and Highland.
W. S. Euclid, bet. 29th and 30th.	" Twenty-fifth and Highland.
" Jackson, 303 ft. n. of Independence	" Brighton and Harris.
S. W. Jackson and Thompson	" Brighton and Scarritt.
" Jackson and Smart	S. S. Valentine rd. 273 ft. w. of Bellevue
W. S. Jackson and Garner.	" High. 120 ft. e. of Penn.
S. W. Cherry and 26th.	S. W. Clinton and Windsor.
" Madison and 18th.	" Clinton and Scarritt.
W. S. Madison, bet. 18th and 19th.	S. E. Thirty-fourth and Jefferson.
S. W. Madison and 20th.	S. W. Eleventh and Bales.
W. S. Madison, bet. 20th and 21st.	W. S. McCoy at City Hospital.
N. W. Myrtle and 16th.	S. S. Thirty-seventh and Forest.
" Myrtle and 18th.	S. W. Thirty-seventh and Tracy.
W. S. Myrtle, 330 ft. s. of 16th.	W. S. Forest, 275 ft. n. of 36th.
N. W. Myrtle and 17th.	S. W. Forest and 36th.
S. W. Smart and Kensington.	" Thirty-first and Michigan.
" Garner and Kensington.	" Thirty-second and Michigan.
" Thompson and Kensington.	" Thirty-third and Michigan.
W. S. Kensington, 298 ft. n. of Indep	" Thirty-fourth and Michigan.
S. E. Twenty-fifth and Harrison.	" Thirty-fifth and Michigan.
N. W. Hammond and Myrtle	" Thirty-first and Jefferson.
" Nineteenth and Myrtle.	" Thirty-second and Jefferson.
" Twenty-fifth and Charlotte.	" Thirty-third and Jefferson.
S. W. Forty-third and Holly.	" Thirty-third and Virginia.
" Forty-third and Jarboe.	" Thirty-fourth and Virginia.
W. S. Holly, 400 ft. n. of 43d.	N. W. Thirty-fifth and Virginia.
N. W. Holly and 42d.	S. S. Tenth, 464 ft. e. of Bales.
" Woodland and 28th.	S. W. Tenth and Cleveland.
W. S. Woodland, 271 ft. s. of 28th.	N. W. Sixteenth and Kensington.
N. W. Woodland and 29th.	" Seventeenth and Kensington.
W. S. Woodland, 245 ft. s. of 29th.	" Eighteenth and Kensington.
S. W. Thirty-third and Vine.	" Nineteenth and Kensington.
W. S. Troost, 399 ft. s. of 35th.	" Twentieth and Kensington.
S. W. Troost and 36th.	S. E. Thirty-fifth and Kenwood.
W. S. Troost, 300 ft. s. of 36th.	" Holmes and Kenwood.
S. W. Troost and 37th.	E. S. Brooklyn, 340 ft. n. of 29th.
W. S. Troost, 333 ft. s. of 37th.	N. E. Brooklyn and 29th.
S. W. Troost and 38th.	N. W. Brooklyn and 28th.
W. S. Troost, 320 ft. s. of 38th.	W. S. Brooklyn, 335 ft. n. of 28th.
N. W. Woodland and 24th.	W. S. Euclid, 244 ft. s. of 31st.
" Woodland and 25th.	" Euclid and 32d.
W. S. Woodland, 339 ft. n. of 26th.	E. S. Brooklyn, 280 ft. s. of 29th.
N. W. Woodland and 26th.	S. S. Ninth, 415 ft. w. of Elmwood.
" Woodland and 27th.	" Ninth, 185 ft. w. of Kensington.
W. S. Wyandotte, 44 ft. s. of 20th.	S. W. Ninth and Jackson.
N. W. Wyandotte and Milwaukee.	" Ninth and Myrtle.
" Thirty-fifth and Vine.	N. W. Sixteenth and Cypress.
" Thirty-fifth and Wyandotte.	" Seventeenth and Cypress.
W. S. Wyandotte, 260 ft. s. of 35th.	" Eighteenth and Cypress.
N. W. Cliff and Mercier.	" Nineteenth and Cypress.
S. W. Denver and Harris.	" Twentieth and Cypress.
W. S. Denver, 335 ft. s. of Harris.	W. S. Highland, 432 ft. n. of 35th.
S. W. Denver and Scarritt.	" Highland, 409 ft. s. of 33d.
" Troost and 39th.	N. W. Highland and 35th.
W. S. Troost, 337 ft. s. of 39th.	E. S. Prospect, 179 ft. n. of 26th.
S. W. Troost and 40th.	W. S. Vine, 283 ft. n. of 21st.
W. S. Troost, 330 ft. s. of 40th.	N. W. Central and High.
S. W. Troost and 41st.	W. S. Main, 300 ft. s. of Westport ave.
W. S. Forest, 255 ft. s. of 34th.	S. W. Thirty-eighth and Wyandotte.
N. W. Forest and 35th.	W. S. Walnut, 276 ft. n. of 38th.
W. S. Tracy, 237 ft. s. of 34th.	S. W. Walnut and 38th.
N. W. Tracy and 35th.	W. S. Walnut, 332 ft. s. of 38th.
S. W. Quincy and Harris.	S. W. Walnut and 36th.
W. S. Quincy, 336 ft. s. of Harris.	" Walnut and 37th.

Respectfully submitted,

CHAS. E. RICKERT, Chief Clerk.

